

# Amir HEYDARINASAB (C.V)

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**Name:** Amir Heydarinasab

**Gender:** Male

**Marital Status:** Married

**Citizenship:** Iranian

**Address:** Dept. of Oil and Chemical Engineering Islamic Azad University Science & Research campus, Tehran, Iran

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## Education

### 2003, Amir-Kabir University , Tehran, Iran

- *PhD in Chemical Engineering. (with Emphasis on Wavelet Transformation and Application on Coarse grid Simulation Reservoir, and optimization CPU time)*
- *Dissertation: "3-D Modeling of Photochemical Air Pollution with Wavelet Transform for Coarsening grid point,".*

### 1997, Sharif University of Technology

- *M.Sc. in Chemical Engineering.(Robust Control Simulation)*
- *Thesis: " Robust Control Design for plate Heat Exchanger ".*

### 1994, Sharif University of Technology

- *B.Sc. in Chemical Engineering.(gas process discipline)*
- *Project: "Design of liner low density poly Ethylene of Arak petrochemical complex"*

## Work Experiences:

- *Head of chemical Engineering Faculty, 2013-Now, Islamic Azad University Science & Research Campus*
- *Associated Professor, 2011 -NOW, Islamic Azad University Science & Research Campus, oil and Chemical Eng. Dept. , Tehran , Iran*
- *Assistant Professor ,2003 -2011,Islamic Azad University Science & Research Campus, Eng. Dept. , Tehran , Iran*

- **Research Assistant, 2002-2003, Amir-Kabir University, Energy and Process Design Center.**

## **Subjects of Research Topics Supervised**

- **Nano drug delivery**
- **Nano catalysis**
- **Membrane Separation**
- **CO2 Capture**
- **Nano technology**
- **Transport phenomena modeling and Simulation (Heat, Momentum and Mass)**
- **Mathematical Simulation (Process Modeling).**
- **Basic Reservoir and Dynamic Simulation.**
- **Rheological Modeling for Non Newtonian & Viscoelastic fluids.**
- **Air pollution modeling (with Wavelet Application).**

## **Basic Reservoir Engineering**

Reservoir characterizing including PVT, VFP, Material Balance and Rock Typing based on litho-facies and electro-facies and Hydraulic flow unit constrained by a chrono-stratigraphic framework (sequence stratigraphic unit)

- **PVT Analysis and Interpretation.**
- **VFP (Vertical Flow Performance) Analysis.**
- **Reservoir Boundary Estimation. (Contacts and Cap Rock)**
- **Material Balance Analysis.**
- **Reservoir Temperature Analysis.**
- **RFT Analysis.**
- **Permeability – Porosity relation Assignment.**
- **Rock Compressibility Analysis.**

- ***Static model Coarsening and Up-Scaling.***
- ***Rock Type & Permeability prediction from Wireline log based on litho facies and electro facies and HFU constrained by HFS***

## **Program Manager, Reservoir Simulation**

Reservoir uncertainty studies, sensitivity analysis for well model and cross section model, well test analysis, numerical method programming with emphasis on global optimization. Involved in all aspects Dynamic models the field. Expert of Eclipse and Petrel RE software including sensitivity analyses and history matching. Complete and thorough knowledge of the Eclipse software. Thorough understanding of the building blocks of RMS models and the relationships of the basic reservoir engineering, static, and dynamic models as an integrated approach to various earth sciences.

- ***Dynamic Modeling (Preparing the Base Model, Well Model, Cross section Model, Sensitivity Analysis, Up-scaling, Initializing )***
- ***History Matching ( Reservoir Pressure Matching, Well By Well Pressure Matching, Reservoir Rate Matching, Well By well Rate Matching, Contact Tracing,... )***
- ***Forecasting ( Natural producing, Rate Changing, EOR Studying, New Drilling, ... )***
- ***Production engineering (Completion and work over, Stimulation, Sand control, Artificial lift design, Gas lift )***

## **Subject of Graduate and Under Graduate Courses Offered**

- ***Skill on ECLIPS software for reservoir simulation (ECL 100, 300, PVTi, VFP,...)***
- ***Reservoir simulation***
- ***Heat Transfer***
- ***Mass Transfer***
- ***Fluid Mechanics (& Rheology)***
- ***Transport Phenomena***
- ***Applied Mathematics in Chemical Engineering***
- ***Applied Numerical Method***
- ***Thermodynamic of Hydrocarbon Reservoir***

## HONORS

- *First rank among the under graduate students of Chem. Eng. Dept., Sharif University of Technology*
- *Out standing graduate student (second rank) of the M.Sc. of Chem. Eng. Dept., Sharif University of Technology*

## PUBLICATIONS

### *INTERNATIONAL:*

- F Zare Kazemabadi, A Heydarinasab, A Akbarzadeh, M Ardjmand, Preparation, characterization and in vitro evaluation of PEGylated nanoliposomal containing etoposide on lung cancer, *Artificial cells, nanomedicine, and biotechnology* 47 (1), 3222-3230 ,2019
- AT Nakhjiri, A Heydarinasab, Computational simulation and theoretical modeling of CO<sub>2</sub> separation using EDA, PZEA and PS absorbents inside the hollow fiber membrane contactor, *Journal of Industrial and Engineering Chemistry* 78, 106-115 ,2019
- PK Hosseini, FP Shariati, HD Amrei, A Heydarinasab, The influence of various orifice diameters on cake resistance and pore blocking resistance of a hybrid membrane photobioreactor (HMPBR), *Separation and Purification Technology*, 116187 ,2019
- HR Kalatjari, A Haghtalab, MRJ Nasr, AH Nasab, Experimental, Simulation and Thermodynamic Modeling of an Acid Gas Removal Pilot Plant for CO<sub>2</sub> Capturing by Mono-Ethanol Amine Solution, *Journal of Natural Gas Science and Engineering*, 103001 ,2019
- AT Nakhjiri, A Heydarinasab, Efficiency evaluation of novel liquid potassium lysinate chemical solution for CO<sub>2</sub> molecular removal inside the hollow fiber membrane contactor: Comprehensive modeling and CFD ..., *Journal of Molecular Liquids*, 111561 ,2019
- M Hassanzadeganroudsari, A Heydarinasab, M Soltani, P Chen, ..., Enhancing anti-cancer efficacy of carboplatin by PEGylated poly (butyl cyanoacrylate) nano-particles, *Journal of Drug Delivery Science and Technology*, 101218 ,2019
- Z Kiayi, TB Lotfabad, A Heidarinasab, F Shahcheraghi, Microbial degradation of azo dye carmoisine in aqueous medium using *Saccharomyces cerevisiae* ATCC 9763, *Journal of hazardous materials* 373, 608-619 ,2019
- GH Varshouee, A Heydarinasab, A Vaziri, SMG Zarand, A Mathematical Model for Investigating the Effect of Reaction Temperature and Hydrogen Amount on the Catalyst Yield during Propylene Polymerization., *Kemija u Industriji* 68 ,2019
- M Hassanzadeganroudsari, A Heydarinasab, P Chen, M Soltani, In vitro investigation of anticancer efficacy of carboplatin-loaded PEGylated nanoliposome particles on brain cancer cell lines, *Journal of Nanoparticle Research* 21 (6), 124 ,2019

- N Shahverdi, A Heydarinasab, HA Panahi, E Moniri, [Synthesis and Evaluation of Enalapril-Loaded PVA/PMC Modified Magnetic Nanoparticles as a Novel Efficient Nano-Carrier](#), *Chemistry Select* 4 (18), 5246-5250 ,2019
- AS Taleghani, P Ebrahimnejad, A Heidarinasab, A Akbarzadeh, [Sugar-conjugated dendritic mesoporous silica nanoparticles as pH-responsive nanocarriers for tumor targeting and controlled release of deferasirox](#), *Materials Science and Engineering: C* 98, 358-368 ,2019
- N Sahebamee, M Soltanieh, SM Mousavi, A Heydarinasab, [Removal of Cu<sup>2+</sup>, Cd<sup>2+</sup> and Ni<sup>2+</sup> ions from aqueous solution using a novel chitosan/polyvinyl alcohol adsorptive membrane](#), *Carbohydrate polymers* 210, 264-273 ,2019
- R Razmi, B Ramavandi, M Ardjmand, A Heydarinasab, [Efficient phenol removal from petrochemical wastewater using biochar-La/ultrasonic/persulphate system: characteristics, reusability, and kinetic study](#), *Environmental technology* 40 (7), 822-834 ,2019
- GH Varshouee, A Heydarinasab, A Vaziri, B Roozbahani, [A mathematical model for determining the best process conditions for average Molecular weight and melt flow index of polypropylene](#), *Bulletin of the Chemical Society of Ethiopia* 33 (1), 169-182 ,2019
- Z Tamri, A Vaziri Yazdi, M Nekoomanesh Haghighi, ..., [Effect of temperature, heating rate and zeolite-based catalysts on the pyrolysis of high impact polystyrene \(HIPS\) waste to produce fuel-like products](#), *Polyolefins Journal* 6 (1), 43-52
- VM Nansa, A Heydarinasab, M Otadi, R Amiri, [Analysing Petroleum Effluent Samples for Determination of Cadmium Using Carbon Nanotubes Followed by Atomic Absorption Spectrometry](#), *Current Nanoscience* 14 (6), 545-554 ,2018
- AT Nakhjiri, A Heydarinasab, O Bakhtiari, T Mohammadi, [Experimental investigation and mathematical modeling of CO<sub>2</sub> sequestration from CO<sub>2</sub>/CH<sub>4</sub> gaseous mixture using MEA and TEA aqueous absorbents through polypropylene hollow fiber ...](#), *Journal of membrane science* 565, 1-13 ,2018
- N Foroud, M Ardjmand, A Heidarinasab, A Akbarzadeh, [Delivery of cisplatin by folic acid-targeted liposomal nanoparticles into liver cancer cell line](#), *International Journal of Polymeric Materials and Polymeric Biomaterials* 67 ... ,2018
- BI Vahedi, A Heydarinasab, HA Panahi, M Jahanshahi, [Synthesis and characterisation of polymer containing dye-affinity ligand grafted to magnetic nanoparticles for enteric insulin delivery](#), *Micro & Nano Letters* 13 (9), 1286-1290 ,2018
- M Sherafati, AS Rad, M Ardjmand, A Heydarinasab, M Peyravi, M Mirzaei, [Beryllium oxide \(BeO\) nanotube provides excellent surface towards adenine adsorption: a dispersion-corrected DFT study in gas and water phases](#), *Current Applied Physics* 18 (9), 1059-1065 ,2018
- Z Tamri, AV Yazdi, MN Haghighi, MS Abbas-Abadi, A Heydarinasab, [The effect of temperature, heating rate, initial cross-linking and zeolitic catalysts as key process and structural parameters on the degradation of natural rubber \(NR\) to ...](#), *Journal of analytical and applied pyrolysis* 134, 35-42 ,2018
- AT Nakhjiri, A Heydarinasab, O Bakhtiari, T Mohammadi, [The effect of membrane pores wettability on CO<sub>2</sub> removal from CO<sub>2</sub>/CH<sub>4</sub> gaseous mixture using NaOH, MEA and TEA liquid absorbents in hollow fiber membrane contactor](#), *Journal of analytical and applied pyrolysis* 134, 35-42 ,2018

- E Binaeian, A Heydarinasab, Adsorption of BSA onto hexagonal mesoporous silicate loaded by APTES and tannin: Isotherm, thermodynamic and kinetic studies, *Advanced Powder Technology* 29 (7), 1664-1675), 2018
- AT Nakhjiri, A Heydarinasab, O Bakhtiari, T Mohammadi, Influence of non-wetting, partial wetting and complete wetting modes of operation on hydrogen sulfide removal utilizing monoethanolamine absorbent in hollow fiber membrane ..., *Sustainable Environment Research* 28 (4), 186-196), 2018
- M Farsi, B Honarvar, A Heydarinasab, M Arjmand, Experimental survey of temperature, time and cross-linking agent effects on polydimethylsiloxane composite membranes performances in sulfur removal, *International Journal of Industrial Chemistry* 9 (2), 177-183), 2018
- M Yasemi, A Heydarinasab, M Rahimi, M Ardjmand, Microchannel as a Green Processes, Compared to Conventional Methods for Extraction of Quercitannin., *Journal of the Chemical Society of Pakistan* 40 (1), 2018
- AT Nakhjiri, A Heydarinasab, O Bakhtiari, T Mohammadi, Modeling and simulation of CO<sub>2</sub> separation from CO<sub>2</sub>/CH<sub>4</sub> gaseous mixture using potassium glycinate, potassium arginate and sodium hydroxide liquid absorber..., *Journal of Environmental Chemical Engineering*, 2018
- M Ebrahimpour, AA Safekordi, SM Mousavi, A Heydarinasab, A miscibility study on biodegradable poly butylene succinate/polydioxanone blends , *Journal of Polymer Research* 25 (2), 35, 2018
- AT Nakhjiri, A Heydarinasab, O Bakhtiari, T Mohammadi ,The effect of membrane pores wettability on CO<sub>2</sub> removal from CO<sub>2</sub>/CH<sub>4</sub> gaseous mixture using NaOH, MEA and TEA liquid absorbents in hollow fiber membrane., *Chinese Journal of Chemical Engineering*, 2018
- , S Vatandoostarani, TB Lotfabad, A Heidarinasab, N Ebadipour, Integrated system of multiple batches to evaluate the continuous performance of microbial cells in decolourization processes *Journal of Environmental Chemical Engineering*, 2018
- R Razmi, B Ramavandi, M Ardjmand, A Heydarinasab, Efficient phenol removal from petrochemical wastewater using biochar-La/ultrasonic/persulphate system: characteristics, reusability, and kinetic study, *Environmental technology*, 1-13, 2017
- S Vatandoostarani, TB Lotfabad, A Heidarinasab, Degradation of azo dye methyl red by *Saccharomyces cerevisiae* ATCC 9763 , S Yaghmaei, *International Bio deterioration & Biodegradation* 125, 62-72, 2017
- N Foroud, M Ardjmand, A Heidarinasab, A Akbarzadeh, Delivery of cisplatin by folic acid-targeted liposomal nanoparticles into liver cancer cell line *International Journal of Polymeric Materials and Polymeric Biomaterials*, 1-8, 2017
- SM Rafigh, A Heydarinasab, Mesoporous Chitosan-SiO<sub>2</sub> Nanoparticles: Synthesis, Characterization, and CO<sub>2</sub> Adsorption Capacity, *ACS Sustainable Chemistry & Engineering* 5 (11), 10379-10386, 2017
- SM Rafigh, A Heydarinasab, Hydroxyethyl curdlan as a novel water soluble derivative: Synthesis, characterization, and antioxidant capacity *International Journal of Polymer Analysis and Characterization* 22 (6), 497-508, 2017

- L Hasandoost, A Akbarzadeh, H Attar, A Heydarinasab, [In vitro effect of imatinib mesylate loaded on poly butyl cyanoacrylate nanoparticles on leukemia cell line K562](#), *Artificial cells, nanomedicine, and biotechnology* 45 (3), 665-669, 2017
- M Yasemi, M Rahimi, A Heydarinasab, M Ardjmand, [Optimization of microfluidic gallic acid extraction using artificial neural network and genetic algorithm](#) *Chemical Product and Process Modeling* 12 (1) 2017
- M Farsi, Heydarinasab, Honarvar, Arjmand, [Structure and performance of PDMS as cross-linking agent upon property of blending PDMS, PEG, PES and PAN membranes](#) *Bulgarian Chemical Communication*, 2017
- [MODELING AND NUMERICAL SIMULATION OF TWO SPECIES SEPARATION USING NON-LINEAR HPLC CHROMATOGRAPHY AT Nakhjiri](#), A Heydarinasab 2017
- M Yasemi, A Heydarinasab, M Rahimi, M Ardjmand, [Microchannels effective method for the extraction of Oleuropein compared with conventional methods](#), *Journal of chemistry*, 2017
- M Farsi, A Heydarinasab, B Honarvar, M Arjmand, [STRUCTURE AND PROPERTY BLENDING OF POLYDIMETHYLSILOXANE, POLYETHYLENE GLYCOL, POLYETHER SULFONE AND POLY ACRYL NITRILE ME..](#) *International Journal of Life Science & Pharma Research* 7, 37-47 2017
- M FARSI, A HEIDARINASAB, B HONARVAR, M ARJMAND, [DESULFURIZATION OF DISLE ISFAHAN OIL REFINERY COMPANY BY POLYDIMETHYLSILOXANE, POLY ETHYLENE GLYCOL, POLYETHERSULFONE AND P...](#) *Life* 50, 22, 2017
- [Loading, release, and solid phase extraction of sorafenib using smart nanoparticles](#) M Faramarzi, A Heydarinasab, HA Panahi, K Kazemi, AM Tamaddon *Annals Tropical Medicine and Public Health*, 2017
- D Ahmadi, A Akbarzadeh, M Arjmand, A Heydarinasab, [Evaluation of Apoptosis rate of Pegylated nanoliposomal oxaliplatin in Breast Cancer MCF-7 and MDA-MB-231 cells](#) *Oriental Journal of Chemistry* 32 (6), 2915-2919, 2016
- [Adsorption of adenine on the surface of nickel-decorated graphene; a DFT study](#) S Gholami, AS Rad, A Heydarinasab, M Ardjmand, *Journal of Alloys and Compounds* 686, 662-668, 2016
- A Heydarinasab, HA Panahi, M Faramarzi, F Farjadian, [Synthesis of thermosensitive magnetic nanocarrier for controlled sorafenib delivery](#) *Materials Science and Engineering: C* 67, 42-50 9 2016, 2016
- S Mardani, M Ghavami, A Heidary-Nasab, M Gharachorloo, [The Effects of Degumming and Neutralization on the Quality of Crude Sunflower and Soyabean Oils](#), *Journal of Food Biosciences and Technology* 6 (2), 47-52, 2016
- SM Rafigh, AV Yazdi, AA Safekordi, AH Nasab, M Ardjmand, F Naderi, [Protein adsorption using novel carboxymethyl-curdlan microspheres.](#) *International journal of biological macromolecules* 87, 603-610, 2016
- FP Mousavi, HH Pour, Amir Heidari Nasab, M Barouni, [Investigation Into Shelf Life of Fresh Dates and Pistachios in a Package Modified With Nano-Silver](#), *Global journal of health science* 8 (5), 134, 2016

- M Soltanieh, A Heidarinasab, M Ardjmand, H Ahmadpanahi, M Bahmani, [Impact of support on the catalytic behavior of Mo/γ-Al<sub>2</sub>O<sub>3</sub> and Mo/MgO catalysts on the desulfurization reaction](#), Applied Catalysis A: General 516, 41-50, 2016
- A Heidarinasab, M Soltanieh, M Ardjmand, H Ahmadpanahi, M Bahmani, [Comparison of Mo/MgO and Mo/γ-Al<sub>2</sub>O<sub>3</sub> catalysts: impact of support on the structure and dibenzothiophene hydrodesulfurization reaction pathways](#), International journal of environmental science and technology 13 (4), 1065-1076, 2016
- A Yousefil, A Akbarzadeh, A Heidarinasab, [ASSESS THE IN VITRO EFFICACY OF NANOPARTICLES AS CARRIERS' MAGNETIC LIPOSOMAL PACLITAXEL ON OVARIAN CANCER](#), NEW CELLULAR & MOLECULAR BIOTECHNOLOGY JOURNAL 6 (24), 81-86, 2016
- N Abdi, NM Azad, A Heidarinasab, F Badii, [Drying of Rutab Fruit for Powder Production](#), Croizatia, 2016
- [Synthesis and Characterization of New Magnetic Catalyst for Azo dyes Decolorization](#) E Ghalei, T Bagheri, A Heidarinasab, S Yaghmaei Croizatia 93 (3), 149-156, 2016
- Khonsha, Amir Heidarinasab<sup>1</sup>, Elham Moniri<sup>2</sup>, Homayon Ahmadpanahi, [Determination of kinetic models for adsorbing chromium \(VI\) onto functionalized magnetic nanoparticles](#), Journal of Chemical and Pharmaceutical Research, 2016
- - Soltanieh, A. Heydarinasab, M. Ardjmand, H. Ahmadpanahi, Morteza Bahmani, [Impact of support on the catalytic behavior of Mo/ γ-Al<sub>2</sub>O<sub>3</sub> and Mo/MgO catalysts on the desulfurization reaction](#), Applied Catalysis A: General, 2016
- Derakhshanfard, Fazeli<sup>1</sup>, Vaziri<sup>1</sup>, Heydarinasab, [Kinetic study of the synthesis of expandable polystyrene via B multi-stage initiator dosing<sup>^</sup> method](#), J Polym Res, 2015
- -Izakhmehri, M. Ardjmand, M. Darvish Ganji, E. Babanezhadd and A. Heydarinasab, [Removal of dioxane pollutants from water by using Al-doped single walled carbon nanotubes](#), RSC Advances, 2015
- -Heydarinasab, Ahmad Panahi, Nematzadeh, Moniri, [Preparation and characterization of iminodiacetic acid: magnetite nanoparticles as a novel famotidine carrier substrate for sustained drug release](#), Monatshefte für Chemie – Chemical Monthly An International Journal of Chemistry, 2015
- -Siami, Ahmad Panahi, Heydarinasab, [Improvement of doxorubicin efficacy by conjugating to pH sensitive copolymer functionalized magnetic nanoparticles](#), Advances in Polymer Technology, 2015
- Azadi, Heydarinasab, Seifkordi, [Purification of recombinant streptokinases by Ion-exchange chromatography](#), International Research Journal of Applied and Basic Sciences, 2014
- -Ghanei, Moradi, Heydarinasab, Ali Akbar Seifkordi, Ardjmand, [Utilization of constructional lime as heterogeneous catalyst in biodiesel production from Waste frying oil](#), International Journal of Environmental Science and Technology, 2014
- R. Ghanei, A. Heydarinasab<sup>2</sup>, G.R. Moradi<sup>3</sup>, V. lahati<sup>1</sup>, [Process optimization for biodiesel production from waste frying oil with constructional lime](#), International Journal of Biosciences, 2014
- M. Haji Hoseini a, M. Ghavami b, A. Heidary-Nasab c, M. Gharachorloo, [The Effect of Bleaching Process on the Physical and Chemical Characteristics of Canola and Sunflower Seed Oils](#), Journal of Food Biosciences and Technology, 2014



- Labbeiki1, Attar, Amir Heydarinasab, Enhanced oxygen transfer rate and bioprocess yield by using magnetite nanoparticles in fermentation media of erythromycin, DARU Journal of Pharmaceutical Sciences 2014
- Mirzazadeh ghanadi, A.Heydari nasab, Numerical simulation and experimental investigation of mass transfer in liquid-liquid jets, Bulgarian Chemical Communications, 2014
- Mirzazadeh ghanadi, A.Heydari nasab, The Effect of Nanoparticles on the Mass Transfer in Liquid-Liquid Extraction, Chemical Engineering Communications, 2014
- Heidari Nasab A., Ghani.R, Moradi G., "Utilization of constructional lime as heterogeneous catalyst in biodiesel production from west frying oil", International journal of Environmental science & technology, (March 2013).
- Heidari Nasab A., Hoseininasab. S, Atari. A., "Fabrication an modified electrode via Ionic-liquid/Bambo-like carbon nanotube/Prussian blue Nano particles as a highly sensitivity Nano-composite for detection of H<sub>2</sub>O<sub>2</sub>", International journal of Electrochemical science, (Feb 2013).
- Heidari Nasab A., Montaser. S, Seifkordi. A., "optimization of microbial culture for production of PHB by azobacter Beijerinckii DSMZ-1041", world applied science journal, 72-82, (2011).
- -Heydarinasab, Malekzadeh, Jahangiri, Magnetic field effect on laminar heat transfer in a pipe for thermal entry region, Journal of Mechanical Science and Technology(JMST), South Korea,2011
- Heydari Nasab A., Montaser. S, Seifkordi. A, "Optimization of microbial culture for production of PHB by azobacter Beijerinckii DSMZ-1041, world applied science journal, 2011
- Heydarinasab, Malekzadeh, Dabir, Magnetic field effect on fluid flow characteristics in the pipe for laminar flow, Journal of Mechanical Science and Technology(JMST), South Korea, 2010
- Heydarinasab,Moghadam Nansa, Time independent Behavior of Tomato past, Journal of Chemistry and Chemical Engineering, USA,2010
- Heidari Nasab A., Dabir B., Sahimi M., "Multi resolution wavelet-Base simulation of Transport and Photochemical reactions in the Atmosphere, Atmos. Env., 38 (2004) 6381-6397.
- Sahimi M., Heidarinasab A. and Dabir B., "Computer simulation of conduction in heterogeneous materials: Application of wavelet transformations, Chemical Engineering Science, volume 59, Issue20, page 4291-4303 (October 2004).
- Heidari Nasab A., Dabir B., Sahimi M." Application of Wavelet Transforms to Heterogeneous Topography and Emission Distribution, In Tehran Air Pollution Simulation Model ". 2004

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*INTERNATIONAL PRESENTATIONS:*

- - Second Iranian Congress of Chemical Engineering ,Design of Robust Control for Heat Exchanger, Shahrokhi, M., Heidari Nasab A.,1998
- -8th Iranian Congress of Chemical Engineering ,3-D Modeling of Photochemical Air Pollution in Tehran with Wavelet Transform, Heidari Nasab A., Dabir Sahimi,2003
- -7th Asia-Pacific Internatnal Symposium on combustion and energy utilization, Simulation of wind field in Tehran city, Rashidy, Dabir, Heidarinasab, 2004
- -9th international seminar on polymer science and technology, Oromiehie, Gaforifard, Heidarinasab, Ganbarzadeh, Barrier properties of whey protein-coated polypropylene films ,2009
- World Academy of Science, Engineering and Technology 62 2010, Time Independent Behavior of Tomato Paste, A. Heidarinasab, V. Moghaddam Nansa, ISSUE 62, FEBRUARY 2010, ISSN: 2070-3724, Penang, Malaysia
- -The 6th International Symposium on Experimental and Computational Aero Thermodynamics of Internal Flow , China, 7-11 April ,2003 “Application of Wavelet Transforms to Heterogeneous Topography and Emission Distribution, In Tehran Air Pollution Simulation Model
- -The 6th ASIA-PACIFIC International Symposium on Combustion and Energy Utilization , Malaysia ,20-22 may ,2002 “Splitting and non Splitting Air Pollution Models of Photochemical Reaction in the urban Areas of Greater Tehran
- Eleventh International Conference on Modeling, Monitoring and Management of Air Pollution ,AIR POLLUTION 2003 ,17-19 September 2003, Catania, Italy “ 3-D Modeling of Photochemical Air Pollution in Tehran with Wavelet Transform
- Thailand , International Conference on Agricultural, Bio systems, Biotechnology & Biological Engineering , Properties of Whey Protein Isolate-Coated PP Films as Affected By Protein Concentration, Gaforifard, Heidarinasab,Oromiehie,2011
- -International journal of chemical Eng. & Environmental , Using Artificial Neural network and leudeking-piret model in kinetic modeling of Microbial Qaderi, Heydarinasab, Arjmand ,2012
- The 8th International Chemical Engineering Congress & Exhibition (IChEC 2014),
- N. Kazemi, O. Tavakoli, A. Heidari Nasab, Catalytic Hydrothermal Treatment of Distillery Wastewater,2014
- 5th International Conference on Nanostructures (ICNS5), Kish Island, Iran, Nematzadeh, Ahmad Panahi, Heydarinasab , Synthesis and characterization of Fe<sub>3</sub>O<sub>4</sub> magnetic nanoparticles for famotidine drug release in human body, 2014

#### *LIST OF NATIONAL PUBLICATIONS AND PRESENTATIONS:*

- Farsi, Heydarinasab,Honarvar,Ardjmand , Desulfurization of Diesel Isfahan oil refinery compony by cross linking of PDMS & PES membrane with TEOS , 2th international

- conference on New Research Achievement in Chemistry & chemical Eng ,Amir Kabir University, (2016)
- Farsi, Heydarinasab,Honarvar,Ardjmand , The effect of cross linking temperature upon density and swelling degree of PDMS & PES membrane, 2th international conference on New Research Achievement in Chemistry & chemical Eng , Amir Kabir University, (2016)
  - Farsi, Heydarinasab,Honarvar,Ardjmand , The effect of TEOS as cross linking agent upon membrane property of blending of PDMS & PES membrane, 2th international conference on New Research Achievement in Chemistry & chemical Eng , Amir Kabir University, (2016)
  - Jahanbakhsh, Heidarinassab, Simulation of trickle bed reactor on basis of Hydrodynamics and mass transfer, 13th national Iranian chemical Engineering congress and 1th international Regional chemical and petroleum Eng , 2011
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- - بررسی رفتار ویسکو الاستیک و وابسته به زمان رب گوجه فرنگی ,امیر حیدری نسب ، وحید مقدم نانساء، مجله علمی پژوهشی صنایع غذایی ، ۱۳۸۹
  - شبیه سازی کامپیوتری انتقال حرارت در پخت تاپیر (مقاله برتر شناخته شده است) دبیر، حیدری نسب ، نوقی ، امانعلی خانی، هفتمین نمایش ملی لاستیک ۱۳۸۳
  - - بررسی حذف بیوفیلم های سودوموناس انروژینوزا توسط آنزیمهای قارچی, نکویی، علوی، حیدری نسب ,دهمین کنگره سراسری میکروبی شناسی, ۱۳۸۸
- Heidari Nasab, A. , Dabir, B. ,Badii, Kh, Sahimi, M. , "Splitting and non Splitting Air Pollution Models of Photochemical Reaction in the urban Areas of Greater Tehran", Amir-kabir Journal of Science and Technology, Spring,1382
  - -Heidarinasab, Saemi,Rock typing and permeability prediction, Oil, Gas and ,1389
  - -Shahrokhi,M. Heidari Nasab, A., , 1998 "Design of Robust Control for Heat Exchanger ", Second Iranian Congress of Chemical Engineering(ICCE-97),Tehran, Iran.
  - -Heidari Nasab, A., Dabir, Sahimi , 2003 "3-D Modeling of Photochemical Air Pollution in Tehran with Wavelet Transform ", 8th Iranian Congress of Chemical Engineering(ICCE-97),Mashhad, Iran.
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## Research Program Related to Modeling and Simulation

- 1-Simulation Reservoir study (& Scale up & multi resolution grid) .
- 2-Phase Equilibrium Calculations (Wax & Asphaltene deposition) .
- 3-pseudo component study for heavy component.
- 4-Mathematical Modeling of Photo-Chemical Reaction of Pollutant Under Different Stability Conditions.

- 5-Mathematical Modeling of Air Pollution Over Mountainous Cities (Like Tehran ) with Emphasis on Air Flow Hydrodynamics.
- 6-Computer Design of Shell and Tube Heat Exchanger.
- 7-Computer Design of Plate Heat Exchanger.
- 8-Study of Urban Air Pollution Models.
- 9- Study of Air Pollution and Acid Rain.

### **Technical Report Related to Modeling and Simulation:**

- 1-Modelling and Simulation of Urban Air Pollution With Emphasis on Tehran Air Pollution, Technical Report NO. 1, Sponsor of Research Fund, Research Department of Amirkabir University of Technology.
- 2-Modelling and Simulation of Urban Air Pollution With Emphasis on Tehran Air Pollution, Technical Report NO. 2, Sponsor of Research Fund, Research Department of Amirkabir University of Technology.
- 3-Mathematical Modelling and Computer Simulation of Urban Air Pollution, With Emphasis of Tehran Air Pollution ( Eulerian Model), AIR POL Computer Package ), Technical Report NO. 4 , Sponsor of Research Fund, Research Department of Amir-kabir University of Technology.
- 4- Scale up Reservoir Simulation (Software), Technical Report NO. 1,2,3 Sponsor of N.I.O.C , Sim.Tech company.
- 5- Asphaltene & Wax deposition with Associated Model, Technical Report of NO. 1, (software),Sponsor of N.I.O.C, Research Department of Amirkabir University of Technology.