Fahime Parvizian

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PERSONAL PARTICULARS

Surname: Parvizian

First name: Fahime

Date of birth: 18th Agust 1984

Place of birth: Arak-Iran

Nationality: Iranian

EDUCATION : CHEMICAL ENGINEERING

Degree	Year	University	Supervisor	Average
PhD	2009-2012	Razi University, Iran	Prof. Masoud Rahimi	19.88
MS	2007-2009	Arak University, Iran	Dr. Abdolreza Moghadassi	18.95
BS	2004-2007	Arak University, Iran	Dr. Abdolreza Moghadassi	18.45

THESES TITLES

Degree	Title
PhD	CFD Study and Experimental Investigation of Ultrasonic Microstream's Effect on Fluid Flow Pattern
MS	Prediction of P-V-T properties of gases using Artificial Neural Network
BS	Applications of Artificial Neural Networks in Chemical Engineering

Awards & Honors

- Ø Distinguished PhD Graduate in Research, Razi University, 2012-2013.
- Ø Award Reception For Compilation The Distinguished Research Book, 2011.
- Ø First Rank BS Graduate, Arak University, Iran, 2007.

RESEARCH EXPERIENCE

Process Engineering

Ultrasonics

Sonoreactor Design

Computational Fluid Dynamic (CFD) Modeling

Artificial Neural Network (ANN) Modeling

TEACHING EXPERIENCE

Lecture

Heat Transfer

Gas Conditioning and Processing

Applied Mathematics in Chemical Engineering

Petroleum Refinery Engineering

Kinetic and reactor design

Computer Programming

Industrial chemistry

Fluid Mechanics

Laboratory

Process Control

BOOK

Applications of CFD in Chemical Engineering

Journal Papers

- Fahime Parvizian, Masoud Rahimi, Neda Azimi, Macro- and micromixing studies on a high frequency continuous tubular sonoreactor, Chemical Engineering and Processing: Process Intensification, 57-58, 8-15, 2012.
- Fahime Parvizian, Masoud Rahimi, Sayedmohsen Hosseini, Sayed siavash Madaeni, Ammar Abdulaziz Alsairafi, The effect of high frequency ultrasound on diffusion boundary layer resistance in ion-exchange membrane transport, Desalination, 286, 155-165, 2012.
- Fahime Parvizian, Masoud Rahimi, Mahbube Faryadi, Macro- and micromixing in a novel sonochemical reactor using high frequency ultrasound, Chemical Engineering and Processing: Process Intensification, 50, 732-740, 2011.
- Fahime Parvizian, Masoud Rahimi, Mahbube Faryadi, Ammar Abdulaziz Alsairafi, A comparison between mixing in a novel high frequency sonoreactor and a stirred tank reactor, Engineering Applications of Computational Fluid Mechanics, 6, 295-306, 2012.
- Fahime Parvizian, Masoud Rahimi, Sayed Reza Shabanian, Constructing predictive models for characteristics of a high frequency continuous flow sonoreactor based on Neural Network, Submitted.
- Fahime Parvizian, Masoud Rahimi, Neda Azimi, Ammar Abdulaziz Alsairafi, CFD modeling of micromixing and velocity distribution in a 1.7 MHz tubular sonoreactor, Chemical Engineering & Technology, Accepted, 2013.
- Masoud Rahimi, Neda Azimi, Fahime Parvizian, Using microparticles to enhance micromixing in a high frequency continuous flow sonoreactor, Chemical Engineering and Processing: Process Intensification, In press, 2013.
- Masoud Rahimi, Neda Azimi, Fahime Parvizian, Microparticle distribution modeling in a high frequency continuous flow sonoreactor using CFD, Submitted.
- Gholamreza Moradi, Fahime Parvizian, An expert model for Estimation of the Performance of Direct Dimethyl Ether Synthesis from Synthesis Gas, The canadian journal of chemical engineering, 89, 1266-1273, 2010.
- Gholamreza Zahedi, Fahime Parvizian, Mahmoodreza Rahimi, Gholamreza Zahedi, Fahime Parvizian, Mahmoodreza Rahimi, Journal of Applied sciences, 10, 1076-1082, 2010.
- Abdolreza Moghadassi, Fahime Parvizian, Bagher Abareshi , Farhod Azari , Iljaz Alhajri, Optimization of regenerative cycle with open feed water heater using genetic algorithms and neural networks, Journal of Thermal Analysis and Calorimetry, 100, 757-767, 2010.

- Abdolreza Moghadassi, Fahime Parvizian, Sayedmohsen Hosseini, Alireza Fazlali, A new approach for estimation of PVT properties of pure gases based on Artificial Neural Network Model, Brazilian Journal of chemical Engineering, 26, 199-206, 2009.
- S.M. Hosseini, F. Parvizian, A.R. Moghadassi, A. Sharifi, M. Adimi, S.J. Hashemi, An expert model for the prediction of water gases thermodynamic properties, Desalination and Water Treatment, 29, 285-293, 2011.
- Abdolreza Moghadassi, Fahime Parvizian, SayedMohsen Hosseini, Application of Artificial Neural Network for Prediction of Liquid Viscosity, Indian Chemical Engineer, 52, 37-48, 2010.
- Abdolreza Moghadassi, Fahime Parvizian, SayedMohsen Hosseini, A New Approach Based on Artificial Neural Networks for Prediction of High Pressure Vapor-liquid Equilibrium, Australian Journal of Basic and Applied Sciences, 3, 1851-1862, 2009.
- Abdolreza Moghadassi, Fahime Parvizian, Sayed Mohsen Hosseini, Amir Sharifi, Prediction of pvt properties of ammonia by using artificial neural network and equations of state, Journal of Engineering and Applied Sciences, 3, 18-27, 2008.
- Abdolreza Moghadassi, Fahime Parvizian, Sayed Mohsen Hosseini, Seyyed Jelaladdin Hashemi, An artificial neural network for prediction of thermodynamic properties; Case study: saturated and superheated water, Chemical Technology: An Indian Journal, 2008.
- Mahmoodreza Nikkholgh, Abdolreza Moghadassi, Fahime Parvizian, Sayedmohsen Hosseini, Estimation of thermophysical properties of dimethyl ether as a commercial refrigerant based on artificial neural networks, Expert Systems with Applications, 37, 7755-7761, 2010.
- Mahmoodreza Nikkholgh, Abdolreza Moghadassi, Fahime Parvizian, Sayedmohsen Hosseini, Estimation of Vapour–Liquid Equilibrium Data for Binary Refrigerant Systems Containing 1,1,1,2,3,3,3-Heptafluoropropane (R227ea) by Using Artificial Neural Networks, The canadian journal of chemical engineering, 88, 200-207, 2010.
- Abdolreza Moghadassi, Sayed Mohsen Hosseini, Fahime Parvizian, Ibrahim Al-Hajri, and Mehdi Talebbeigi, Predicting the supercritical carbon dioxide extraction of oregano bract essential oil, Songklanakarin Journal of Science and Technology, 33, 531-538, 2011.
- R. Moghadassi, M. R. Nikkholgh, S. M. Hosseini, F. Parvizian, A. Sanaeirad, Vapour Liquid Equilibrium Data Prediction For Binary Systems Containing Propane, ARPN Journal of Engineering and Applied Sciences, 6, 95-103, 2011.
- Abdolreza Moghadassi, Mahmoodreza Nikkholgh, Sayedmohsen Hosseini, Fahime Parvizian, Estimation of Vapor Pressures, Compressed Liquid and Supercritical Densities for Sulfur Dioxide by Using Artificial Neural Networks, International Journal of Industrial Chemistry, 2012.

- Abdolreza Moghadassi, Mahmood Reza Nikkholgh, Sayed Mohsen Hosseini, Fahime Parvizian, Seyyed Jelaladdin Hashemi, A New Approach to Train Multilayer Perceptron ANN Using Error Back-propagation and Genetic Algorithms Hybrid: A Case Study of PVTx Estimation of CH4+CF4 Gas Mixture, International Journal of Industrial Chemistry, 2, 177-182, 2011.

- R. Moghadassi1, M. R. Nikkholgh, S. M. Hosseini, F. Parvizian, A. Sanaeirad, Prediction Of Vapor Liquid Equilibrium (Vle) Data For Binary Systems; Case Study: Methane/Tetrafluoromethane, ARPN Journal of Engineering and Applied Sciences, 6, 100-107, 2011.

Conference Papers

- Fahime Parvizian, Mahbube Faryadi, Masoud Rahimi, CFD modeling of flow pattern sonoreactor a high-frequency sound, 3th National Congress Application of CFD in Chemical Industrial, Tehran, Iran, 2011.

- M. Faryadi, F. Parvizian, M. Rahimi, CFD modeling of Ultrasound wave propagation in a liquid phase medium, 13th Iranian National Chemical Engineering Congress (IChEC 13) &1th International Regional Chemical and Petroleum Engineering conference, Razi University Kermanshah, IRAN, 2010.

- M. Faryadi, F. Parvizian, M. Rahimi, Prevention and Removal of Gas Hydrates in Pipelines by Using Ultrasonic Waves, The 7th International Chemical Engineering Congress & Exhibition (IChEC 2011) Kish, Iran, 2011.

- Neda Azimi, Mahbube Faryadi, Fahime Parvizian, Masoud Rahimi, CFD modeling of countinous flow sonoreactor, The 14th Iranian National Chemical Engineering Congress (IChEC 2012).

- F. Ahangarani Farahani, A.R.Moghadassi, F.Parvizian, An Expert model for determination the flow friction coefficient and pressure drop of pipes, 13th Iranian National Chemical Engineering Congress (IChEC 13) &1th International Regional Chemical and Petroleum Engineering conference, Razi University Kermanshah, IRAN, 2010.

- A.R. Moghadassi, M. R. Nikkholgh, F. Parvizian, S. M. Hosseini, Comparison between an Artificial Neural Network Model and Equations of State to Estimate Pressure-Volume-Temperature Data in the System of CH4+CF4, 14th Oil, Gas & Petrochemical Congress, May 2010 Tehran, I.R. of Iran, 2010.

- A.R. Moghadassi, M. R. Nikkholgh, S. J. Hashemi,F. Parvizian, A New Approach to Train Multilayer Perceptron ANN Using Error Back-propagation and Genetic Algorithms Hybrid, 14th Oil, Gas & Petrochemical Congress, May 2010 Tehran, I.R. of Iran, 2010.

- M.R. Nikkholgh, A.R. Moghadassi , F. Parvizian, An Intelligent Approach to Estimate Pressure-Volume-Temperature Properties in the System of Methane, The 6th International Chemical Engineering Congress (IChE2009), 16-20 November, 2009 Kish Island, I. R. Iran, 2009.

- M.R. Nikkholgh, A.R. Moghadassi, F. Parvizian, A.R. Agha Aminiha, Prediction Of Dimethyl Ether Density Using Artificial Neural Network, The 6th International Chemical Engineering Congress (IChE2009), 16-20 November, 2009 Kish Island, I. R. Iran, 2009.

- M.R. Nikkholgh, A.R. Moghadassi, F. Parvizian, A New Approach For Estimating Compressibility Factor Of Natural Gas Based On Artificial Neural Network, The 6th International Chemical Engineering Congress (IChE2009), 16-20 November, 2009 Kish Island, I. R. Iran,2009.

- Fahime Parvizian, Sayedmohsen Hosseini, Alireza Fazlali, Furough Mohseni, Thermodynamics models for estimation of the solubility parameter based on PR and SRK equations of state, The First Iranian Specialty Thermodynamic Conference, 2007.

- Fahime Parvizian, Mostaf, Moravej, Abolfazl Barati, Numerical simulation of multiphase flow in bubble column, The 5th International Chemical Engineering Congress & Exhibition, 2008.

- Abdolreza Moghadassi, Fahime Parvizian, Bagher Abareshi, Farhod Azari, Optimization of regenerative cycle with open feed water heater by Genetic algorithm & Neural Networks, The 12th Iranian Chemical Engineering Congress, Sahand university, Tabriz, Iran, 2008.

- Amir Sharifi , Abdolreza Moghadassi, Fahime Parvizian, SayedMohsen Hosseini, Prediction of PVT properties of Ammonia by using Artificial Neural Network and equations of state, The 12th Iranian Chemical Engineering Congress, Sahand university, Tabriz, Iran, 2008.

- M.R. Nikkholgh, A.R. Moghadassi, F. Parvizian, S.M. Hosseini, Estimation of Vapor Liquid Equilibrium (VLE) Data for Binary Refrigerant systems containing 1, 1, 1, 2, 3, 3, 3heptafluoropropane (R227ea) by using Artificial Neural Networks, First International EConference on Artificial Intelligence applications in Chemical Engineering (AIACE). Simulation and Artificial Intelligence Research Center, Department of Chemical Engineering, Razi University, Kermanshah, Iran, 2009.

- Asghar Mokhtari, Abdolreza Moghadassi, Fahimeh Parvizian, Optimization of water consumption in Imam Khomeini oil refining company of shazand using mathematical programming, The 14th Iranian National Chemical Engineering Congress (IChEC 2012).