



Ahmadreza Raisi

Born 1978, November, 21th
Married and one child

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EMPLOYMENT

- Chemical Engineering Department of Amirkabir University of Technology (Tehran Polytechnic) (2009 up to now).
- Modeling and Control Department of Research Institute of Petroleum Industry (2006-2010).
- Chemical and Polymer Engineering Research Center of Emam Hossein University (2003-2006).

EDUCATION

- **Ph.D.** in Chemical Engineering, Amirkabir University of Technology, Tehran, Iran, 2003-2008.
- **MSc.** in Chemical Engineering (Food Engineering), Amirkabir University of Technology, Tehran, Iran, 2001-2003.
- **BSc.** in Chemical Engineering (Petrochemical Engineering), Shiraz University, Shiraz, Iran, 1997-2001.

RESEARCH

FIELD

- Membrane separations in chemical and food engineering
- Membrane synthesis and characterization
- Process modeling and simulation

MEMBERSHIP

- Member of Iranian Association of Chemical Engineers
- Member of Iranian Food Science and Technology Association

**TEACHING
EXPERIENCE**

Undergraduate:

- Unit Operation I
- Unit Operation II
- Numerical Analysis
- Applied Mathematics in Chemical Engineering
- Food Industry Engineering

Graduate:

- Advanced Engineering Mathematics
- Unit Operation Designing in Food Engineering
- Membrane Separation Processes

PUBLICATIONS

Journal Papers:

- 1) **Raisi A.** and Aroujalian A., Reduction of the glucose syrup browning rate by the use of modified atmosphere packaging, Journal of Food Engineering, 80(1), 2007, 370-373.
 - 2) Aroujalian A. and **Raisi A.**, Recovery of volatile aroma components from orange juice by pervaporation, Journal of Membrane Science, 303 (1-2), 2007, 154-161.
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- 3) **Raisi A.**, Aroujalian A. and Kaghazchi T., Multicomponent pervaporation process for volatile aroma compounds recovery from pomegranate juice, *Journal of Membrane Science*, 322, 2008, 339–348.
- 4) Raisi A., Mirzazadeh M., Dehnavi A.S. and Rashidi F., An approximate solution for the Couette-Poiseuille flow of viscoelastic fluids between parallel plates, *Rheology Acta*, 47, 2008, 75-80.
- 5) **Raisi A.** and Aroujalian A., Pervaporation as a means of recovering ethanol from lignocellulosic bioconversions, *Desalination*, 251, 2009, 1-9.
- 6) **Raisi A.**, Aroujalian A. and Kaghazchi T., A predictive mass transfer model for pervaporative aroma recovery from multicomponent solutions, *Journal of Food Engineering*, 95, 2009, 305–312.
- 7) Habibi A., Aroujalian A., **Raisi A.** and Zokae F., Influence of operating parameters on clarification of carrot juice by microfiltration process, *Journal of Food Process Engineering*, 34 (3), 2011, 860-877.
- 8) **Raisi A.**, Aroujalian A. and Kaghazchi T., Experimental study and mass transport modeling of ethanol separation from aqueous solutions by pervaporation process, *Separation Science and Technology*, 44, 2009, 3538–3570.
- 9) Rafia N., Aroujalian A. and **Raisi A.**, Pervaporative aroma compounds recovery from lemon juice using poly(octyl methyl siloxane) membrane.” *Journal of Chemical Technology and Biotechnology*, 86, 2011, 534–540.
- 10) Razi B., Aroujalian A., **Raisi A.** and M. Fathizadeh, Clarification of tomato juice by cross-flow microfiltration, *International Journal of Food Science and Technology*, 46, 2011, 138-145.
- 11) M. Fathizadeh, Aroujalian A. and **Raisi A.**, Effect of added NaX nanozeolite into polyamide as a top thin layer of membrane on water flux and salt rejection in a reverse osmosis process, *Journal of Membrane Science*, 375, 2011, 88–95.
- 12) M. Aliabadi, Aroujalian A. and **Raisi A.**, Pervaporative removal of acrylonitrile from aqueous streams through polydimethylsiloxane membrane, *Water Science and Technology*, 63 (12), 2011, 2820–2826.
- 13) **Raisi A.** and Aroujalian A., Aroma compound recovery by hydrophobic pervaporation: The effect of membrane thickness and coupling phenomena, *Separation and Purification Technology*, 85, 2011, 53-62.
- 14) M. Aliabadi, Aroujalian A. and **Raisi A.**, Removal of styrene from petrochemical wastewater using pervaporation process, *Desalination*, 284 (4), 2011, 116-121.
- 15) M. Fathizadeh, Aroujalian A. and **Raisi A.**, Effect of lag time in interfacial polymerization on polyamide composite membrane with different hydrophilic sub layers, *Desalination*, 284 (4), 2011, 32-41.
- 16) H. Sanaeepura, O. Hosseinkhania, A. Kargaria, A. Ebadi Amooghbin and **Raisi A.**, Mathematical modeling of a time dependent extractive membrane bioreactor for denitrification of drinking water, *Desalination*, 289, 2012, 58–65.

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- 17) A. S. Dehnavi, Aroujalian A., **Raisi A.** and S. Fazel, Preparation and characterization of polyethylene/silver nanocomposite films with antibacterial activity, *Journal of Applied Polymer Science*, 127, 2012, 1180-1190.
- 18) M. Mafi, **Raisi A.**, Hatam M. and Aroujalian A., A mathematical model for mass transfer in hydrophobic pervaporation for organic compounds separation from aqueous solutions, *Journal of Membrane Science*, 423-424, 2012, 175-188.
- 19) A. S. Dehnavi, **Raisi A.** and Aroujalian A., Control size and stability of colloidal silver nanoparticles with antibacterial activity prepared by a green synthesis method, *Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry*, 44, 2013, 543-551.
- 20) I. Sadeghi, Aroujalian A., **Raisi A.**, Dabir B. and Fathizadeh M., "Surface modification of polyethersulfone ultrafiltration membranes by corona air plasma for separation of oil/water emulsions, *Journal of Membrane Science*, 430, 2013, 24-36.
- 21) R. Golestani, **Raisi A.** and Aroujalian A., Mathematical modeling on air drying of apples considering shrinkage and variable diffusion coefficient, *Drying Technology*, 31, 2013, 40-51.
- 22) K. Masoudnia, **Raisi A.**, Aroujalian A. and Fathizadeh M., Treatment of oily wastewaters using the microfiltration process: Effect of operating parameters and membrane fouling study, *Separation Science and Technology*, 48, 2013, 1544-1555.
- 23) M. Keshavarz Moraveji, **Raisi A.**, Esmaeeli E., Hosseini S.M., Pazouki Gh. and Aroujalian A., CFD modeling of ethanol separation from aqueous solutions by hydrophobic pervaporation process, *Desalination and Water Treatment*, 51, 2013, 3445-3453.
- 24) M. Fathizadeh, Aroujalian A., **Raisi A.** and Fotouhi M., Preparation and characterization of thin film nanocomposite membrane for pervaporative dehydration of aqueous alcohol solutions, *Desalination*, 314, 2013, 20-27.
- 25) H. Mokarizadeh, Asgharian M. and **Raisi A.**, Heat transfer in the Couette-Poiseuille flow of the Giesekus viscoelastic fluids between parallel plates, *Journal of Non-Newtonian Fluid Mechanics*, 196, 2013, 95-101.
- 26) M. Mafi, **Raisi A.** and Aroujalian A., Computational fluid dynamics modeling of mass transfer for aroma compounds recovery from aqueous solutions by hydrophobic pervaporation, *Journal of Food Engineering*, 119, 2013, 46-55.
- 27) M. Omidali, **Raisi A.** and Aroujalian A., Separation and purification of isobutanol from dilute aqueous solutions by a hybrid hydrophobic/hydrophilic pervaporation process, *Chemical Engineering and Processing*, 77, 2014, 22-29.
- 28) M. Mafi, **Raisi A.**, Hatam M. and Aroujalian A., A mass transfer model for pure alcoholic permeation through the PDMS membrane, *Desalination and Water Treatment*, 52, 2014, 7628-7636.

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- 29) M. Ansari, Aroujalian A., **Raisi A.**, Dabir B. and Fathizadeh M., Preparation and characterization of ultrafine nano NaX zeolite by microwave assisted hydrothermal method, *Advanced Powder Technology*, 25, 2014, 722-727.
- 30) V. Moghimifar, **Raisi A.**, and Aroujalian A., Surface modification of polyethersulfone ultrafiltration membranes by corona plasma-assisted coating TiO₂ nanoparticles, *Journal of Membrane Science*, 461, 2014, 69-80.
- 31) M. Mafi, **Raisi A.**, Hatam M. and Aroujalian A., A comparative study on the free volume theories for diffusivity through polymeric membrane in pervaporation process, *Journal of Applied Polymer Science*, 131, 2014, 40581.
- 32) M. Toroghi, **Raisi A.**, and Aroujalian A., Preparation and characterization of polyethersulfone/silver nanocomposite ultrafiltration membrane for antibacterial applications, *Polymers for Advanced Technologies*, 25, 2014, 711-722.
- 33) R. Sadeghnejad, Aroujalian A., **Raisi A.**, and Fazel Sh., Antibacterial nano silver coating on the surface of polyethylene films using corona discharge, *Surface and Coatings Technology*, 245, 2014, 1-8.
- 34) T. Alavi, Pazuki Gh. and **Raisi A.**, Solubility of fructose in water-ethanol and water-methanol mixtures by using h-bonding models, *Journal of Food Science*, 79, 2014, 868-848.
- 35) **Raisi A.** and Aroujalian A., Separation of ethanol from dilute aqueous solutions: influence of operating parameters on flux and selectivity, *Amirkabir Journal of Science and Technology*, 19 (68-D), 2008, 61-67.
- 36) **Raisi A.** and Aroujalian A., Effects of influence parameters on color formation in glucose syrups during storage, *Amirkabir Journal of Science and Technology*, 42 (1), 2010, 57-61.
- 37) K. Masoudnia, **A. Raisi**, A. Aroujalian and M. Fathizadeh, Cross-flow microfiltration oil-in-water emulsion using polyvinylidene fluoride membrane, *Procedia Engineering*, 44, 2012, 1974-1976.
- 38) I. Sadeghi, A. Aroujalian, **A. Raisi**, M. Fathizadeh and B. Dabir, Effect of solvent, hydrophilic additives and corona treatment on performance of polyethersulfone UF membranes for oil/water separation, *Procedia Engineering*, 44, 2012, 1539-1541.
- 39) A. Esmaili Livari, A. Aroujalian, **A. Raisi** and M. Fathizadeh, The effect of TiO₂ nanoparticles on PES UF membrane fouling in water-oil separation, *Procedia Engineering*, 44, 2012, 1783-1785.
- 40) K. Masoudnia, **Raisi A.**, Aroujalian A. and Fathizadeh M., A hybrid microfiltration/ultrafiltration membrane process for treatment of oily wastewater, *Desalination and Water Treatment*, 55, 2015, 901-912.
- 41) M. Fathizadeh, Aroujalian A. and **Raisi A.**, Preparation and characterization of thin film composite reverse osmosis membranes with wet and dry support layer, *Desalination and Water Treatment*, 56, 2015, 2284-2295.
- 42) S. Panahian, Raisi A., and Aroujalian A., Multilayer mixed matrix membranes containing modified-MWCNTs for dehydration of alcohol by pervaporation process, *Desalination*, 355, 2015, 45-55.

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- 43) M. Ansari, **Raisi A.**, Aroujalian A., Dabir B. and Irani M., Synthesis of Nano-NaX Zeolite by Microwave Heating 3 Method for Removal of Lead, Copper, and Cobalt Ions 324 4 1 from Aqueous Solution, *Journal of Environmental Engineering*, 141, 2015, 04014088.
- 44) Shoghl, S.N., **Raisi, A.** and Aroujalian, A., A predictive mass transport model for gas separation using glassy polymer membranes, *RSC Advances*, 5 (48), 2015, 38223-38234.
- 45) Moghimifar, V., Livari, A.E., **Raisi, A.** and Aroujalian, A., Enhancing the antifouling property of polyethersulfone ultrafiltration membranes using NaX zeolite and titanium oxide nanoparticles, *RSC Advances*, 5(96), 2015, 55964-55976.
- 46) Zarshenas, K., **Raisi, A.** and Aroujalian, A., Surface modification of polyamide composite membranes by corona air plasma for gas separation applications, *RSC Advances*, 5(25), 2015, 19760-19772.
- 47) Habibiannjad, S.A., Aroujalian, A. and **Raisi, A.**, Pebax-1657 mixed matrix membrane containing surface modified multi-walled carbon nanotubes for gas separation, *RSC Advances*, 6(83), 2016, 79563-79577.
- 48) Shoghl, S.N., **Raisi, A.** and Aroujalian, A. A predictive model for gas and vapor sorption into glassy membranes at high pressure, *RSC Advances*, 2016, 6(62), 57683-57694.
- 49) A. Shokohi, **Raisi A.** and Pazuki Gh., Evaluation of thermodynamic models for prediction of sorption behavior into the polydimethylsiloxane membrane in pervaporation process, *Chemical Engineering Communications*, 2016, 20.3, 8-17.
- 50) Zarshenas, K., **Raisi, A.** and Aroujalian, A., Mixed matrix membrane of nano-zeolite NaX/poly (ether-block-amide) for gas separation applications, *Journal of Membrane Science*, 510, 2016, 270-283.
- 51) Karimi, E., **Raisi, A.** and Aroujalian, A., TiO₂-induced photo-cross-linked electrospun polyvinyl alcohol nanofibers microfiltration membranes, *Polymer*, 99, 2016, 642-653.
- 52) Afkham, S., **Raisi, A.** and Aroujalian, A., Reducing fouling of polyethersulfone microfiltration membranes by corona air plasma, *Desalination and Water Treatment*, 57, 2016, 26976-26992.

International Conferences Papers:

- 1) Aroujalian A. and **Raisi A.**, “Effects of influence parameters on color formation in glucose syrups during storage.” The 54th Canadian Chemical Engineering Conference, Calgary, Alberta, Canada, October, 2004.
- 2) Rashidi F. and **Raisi A.**, “Couette-Poiseuille flow of viscoelastic fluids between parallel plates.” The 2nd International Conference on Advances in Petrochemicals and Polymers (ICAPP 2007), Bangkok, Thailand, June, 2007.
- 3) Eslami Sh., Aroujalian A., Bonakdarpoor B. and **Raisi A.**, “Coupling of pervaporation system with fermentation process.” The 6th European

PUBLICATION

- Congress of Chemical Engineering, Copenhagen, Denmark, September 2007.
- 4) **Raisi A.**, Aroujalian A. and Kaghazchi T., "Evaluation of membrane performance for aroma compounds recovery from pomegranate juice by pervaporation." International Congress on Membranes and Membrane Processes (ICOM2008), Honolulu, Hawaii, July 12-18, 2008.
 - 5) Manshaee K., Aroujalian A. and **Raisi A.**, "Influence of enzymatic parameters on yield of carrot juice." The 5th International Chemical Engineering Congress & Exhibition (IChEC 2008), Kish Island, Iran, January 2008.
 - 6) Panahi R., Aroujalian A., Zokaee F. and **Raisi A.**, "Concentration of carrot juice using osmotic membrane distillation process." The 5th International Chemical Engineering Congress & Exhibition (IChEC 2008), Kish Island, Iran, January 2008.
 - 7) Habibi A., Aroujalian A., Zokaee F. and **Raisi A.**, "Clarification of carrot juice with membrane and enzymatic processes." The 5th International Chemical Engineering Congress & Exhibition (IChEC 2008), Kish Island, Iran, January 2008.
 - 8) **Raisi A.**, Aroujalian A. and Kaghazchi T., "Pervaporation of a model pomegranate juice aroma solution using a polydimethylsiloxane membrane." The 8th World Congress of Chemical Engineering (WCCE8), Montreal, Canada, August 2009.
 - 9) Rafia N., Aroujalian A. and **Raisi A.**, "Pervaporation process for recovery of volatile aroma components of lemon juice condensate." 5th International Conference on the Food Factory for the Future (Food Factory 2010), Gothenburg, Sweden, July 2010.
 - 10) Razi B., Aroujalian A. and **Raisi A.**, "Analysis of operating parameters in clarification of tomato juice by ultrafiltration." 5th International Conference on the Food Factory for the Future (Food Factory 2010), Gothenburg, Sweden, July 2010.
 - 11) Aliabadi M., Aroujalian A. and **Raisi A.**, "Removal of styrene from aqueous solution by pervaporation." IWA Regional Conference and Exhibition on Membrane Technology and Water Reuse (IWA-MTWR 2010), Istanbul, Turkey, 2010.
 - 12) Yavari M., Aroujalian A. and **Raisi A.**, "Effect of modified atmosphere packaging on staleness and moisture content of hamburger-bread buns." International Food Congress-Novel Approaches In Food Industry (NAFI 2011), Izmir, Turkey, 2011.
 - 13) M. Fathizadeh, Aroujalian A. and **Raisi A.**, "Effect of wet and dry porous support layers on polyamide formation in thin film composite membranes." International Congress on Membranes and Membrane Processes (ICOM2011), Amsterdam, Netherlands, 2011.
 - 14) M. Fathizadeh, Aroujalian A. and **Raisi A.**, "Effect Nano-Zeolite in polyamide reverse osmosis membrane matrix." 2nd International Conference on Nanotechnology: Fundamentals and Applications, Ottawa, Canada, 2011.
 - 15) M. Toroghi, Aroujalian A., **Raisi A.** and M. Fathizadeh, "Fabrication of Silver/Polyethersulfone Nanocomposite Membrane with

PUBLICATIONS

- Antibacterial Activity.” 61th Canadian Chemical Engineering Conference, London, Ontario, Canada, 2011.
- 16) F. Rabiee, Aroujalian A., **Raisi A.** and M. Fathizadeh, “Effect of Nano NaX Zeolite on PES Membrane Using for Ethanol/Water Pervaporation Performance.” 61th Canadian Chemical Engineering Conference, London, Ontario, Canada, 2011.
- 17) M. Fathizadeh, Aroujalian A. and **Raisi A.**, “Effect of Different Solvents on Thin Film Nano-Zeolite/Polyamide Composite Reverse Osmosis Membrane.” 61th Canadian Chemical Engineering Conference, London, Ontario, Canada, 2011.
- 18) M. Fathizadeh, Aroujalian A. and **Raisi A.**, “Effect of Initial Conditions of Porous Support Layer on Polyamide Preference and Surface Properties.” 61th Canadian Chemical Engineering Conference, London, Ontario, Canada, 2011.
- 19) S. M. Mofidi, S. Rahnama and **Raisi A.**, “Modeling of Microwave Heating of Mashed Potato with Temperature Dependent Thermal and Dielectric Properties.” The 7th International Chemical Engineering Congress & Exhibition (IChEC 2011), Kish Island, Iran, 2011.
- 20) A. S. Dehnavi, Aroujalian A., **Raisi A.** and S. Fazel, “Preparation of colloidal silver nanoparticles with antibacterial activity by a simple chemical reduction method.” The 7th International Chemical Engineering Congress & Exhibition (IChEC 2011), Kish Island, Iran, 2011.
- 21) M. Toroghi, Aroujalian A., **Raisi A.** and M. Fathizadeh, “Preparation and characterization of antibacterial polyethersulfone ultrafiltration membrane.” The 7th International Chemical Engineering Congress & Exhibition (IChEC 2011), Kish Island, Iran, 2011.
- 22) M. Yavari, Aroujalian A. and **Raisi A.**, “Effect of modified atmosphere packaging on bread staling.” The 7th International Chemical Engineering Congress & Exhibition (IChEC 2011), Kish Island, Iran, 2011.
- 23) F. Rabiee, Aroujalian A., **Raisi A.** and M. Fathizadeh, “Effect of fabrication parameters on the performance zeolite filled composite pervaporation membranes.” The 7th International Chemical Engineering Congress & Exhibition (IChEC 2011), Kish Island, Iran, 2011.
- 24) R. Golestani, Aroujalian A. and **Raisi A.**, “Effect of temperature and modified atmosphere on drying kinetics and color of dried golden apple.” The 7th International Chemical Engineering Congress & Exhibition (IChEC 2011), Kish Island, Iran, 2011.
- 25) S. Sadeghnejad, Aroujalian A., **Raisi A.** and S. Fazel, “Synthesis and characterization of stable silver nanoparticles by a green chemical reduction method.” The 2nd International Conference on Nanotechnology and Biosensors, Visakhapatnam, India, December, 2011.
- 26) S. Sadeghnejad, Aroujalian A., **Raisi A.** and S. Fazel, “Preparation of silver nanoparticles with antibacterial properties by a green synthesis method.” The 1st International Conference on Nanostructures and
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PUBLICATIONS

- Nanomaterials: Science and Applications during, Masjedsoleyman, Iran, Feb 2012.
- 27) M. Ansari, Aroujalian A., **Raisi A.**, Fathizadeh M. and Dabir B., "Preparation and characterization of nano NaX zeolite by conventional hydrothermal and microwave heating methods." 3rd Iran International Zeolite Conference (IIZC 2012), Arak, Iran, June 2012.
 - 28) F. Rabiee, **Raisi A.** and Aroujalian A., "Effect of inorganic filler on the separation performance of a mixed matrix pervaporation membrane." 12th International Conference on Inorganic Membranes, Enschede, Netherlands, July 2012.
 - 29) A. Esmaeli Livari, Aroujalian A., **Raisi A.** and Fathizadeh M., "The effect of TiO₂ nanoparticles on PES UF membrane fouling in water-oil separation." Euromembrane 2012, London, United Kingdom, September 2012.
 - 30) I. Sadeghi, Aroujalian A., **Raisi A.**, Fathizadeh M. and Dabir B., "Effect of solvent, hydrophilic additives and corona treatment on performance of polyethersulfone UF membranes for oil/water separation." Euromembrane 2012, London, United Kingdom, September 2012.
 - 31) K. Masoudnia, **Raisi A.**, Aroujalian A. and Fathizadeh M., "Cross-flow microfiltration oil-in-water emulsion using polyvinylidene fluoride membrane." Euromembrane 2012, London, United Kingdom, September 2012.
 - 32) M. Omidali, Aroujalian A. and **Raisi A.**, "Using of polydimethylsiloxane composite membrane for isobutanol separation from aqueous solution by pervaporation." 10th International Seminar on Polymer Science and Technology, Tehran, Iran, October 2012.
 - 33) A. Mafi, **Raisi A.**, Hatam M. and Aroujalian A., "Mass transfer modelling of pervaporation process for separation of ethanol from its aqueous solutions with polydimethylsiloxane membrane." 10th International Seminar on Polymer Science and Technology, Tehran, Iran, October 2012.
 - 34) A. Esmaeli Livari, Aroujalian A., **Raisi A.** and Fathizadeh M., "Fabrication of polyethersulfone membrane for separation of oil/water mixture using ultrafiltration process." 10th International Seminar on Polymer Science and Technology, Tehran, Iran, October 2012.
 - 35) K. Masoudnia, **Raisi A.**, Aroujalian A. and Fathizadeh M., "Effect of high molecular weight additive on performance of ultrafiltration membrane for separation of oil in water emulsions." 10th International Seminar on Polymer Science and Technology, Tehran, Iran, October 2012.
 - 36) I. Sadeghi, Aroujalian A., **Raisi A.**, Fathizadeh M. and Dabir B., "Comparison of the performance of wet and dry PES UF membrane for oil/water separation." 10th International Seminar on Polymer Science and Technology, Tehran, Iran, October 2012.
 - 37) M. Ansari, Aroujalian A. and **Raisi A.**, "Removal of heavy metal from aqueous solutions using nano zeolite." 62nd Canadian Chemical

PUBLICATIONS

- Engineering Conference (cschE2012), Vancouver, Canada, October 2012.
- 38) A. Mafi, **Raisi A.**, Hatam M. and Aroujalian A., “Modeling of mass transfer through pervaporation of pure compounds with the polydimethylsiloxane membrane.” 62nd Canadian Chemical Engineering Conference (cschE2012), Vancouver, Canada, October 2012.
- 39) A. Mafi, **Raisi A.**, Hatam M. and Aroujalian A., “Modeling of ethanol permeation through the polydimethylsiloxane membrane using computational fluid dynamics technique.” World Congress on Engineering and Computer Science 2012, San Francisco, USA, October 2012.
- 40) M. Talebian, Aroujalian A., **Raisi A.** and Irani M., “Separation Performance of Polyethersulfone/NaX Zeolite Mixed Matrix Membranes for Carbon Dioxide Removal.” II Membrane Separation Processes Symposium (SIMPAM 2013), Rio de Janeiro, Brazil, September 2013.
- 41) V. Moghimifar, **Raisi A.**, Aroujalian A. and Irani M., “Modification of Polyethersulfone Ultrafiltration Membrane by Corona Treatment and Coating TiO₂ Nanoparticle on the Surface.” II Membrane Separation Processes Symposium (SIMPAM 2013), Rio de Janeiro, Brazil, September 2013.
- 42) Y. Fathi Sola, **Raisi A.**, Aroujalian A. and Irani M., “Fabrication of Composite Polyvinyl Alcohol/Polyethersulfone Membrane for Dehydration of Alcohols by Pervaporation Process.” II Membrane Separation Processes Symposium (SIMPAM 2013), Rio de Janeiro, Brazil, September 2013.
- 43) A. Shokouhi, **Raisi A.**, Pazuki G. and Irani M., “Application of the UNIQUAC-HB Model in the Sorption Behavior of Ethanol/Water Mixtures into Polydimethylsiloxane Membrane at Different Temperature.” II Membrane Separation Processes Symposium (SIMPAM 2013), Rio de Janeiro, Brazil, September 2013.
- 44) V. Moghimifar, **Raisi A.**, Aroujalian A. and Bayani Bandpey N., “Preparation of nano crystalline titanium dioxide by microwave hydrothermal method.” 4th International Conference on Ultrafine Grained and Nano-Structured Materials (UFGNSM2013), Tehran, Iran, November 2013.
- 45) N. Bayani Bandpey, Aroujalian A. and **Raisi A.**, “Fabrication of nano silver/polyethylene packaging films with controlled release of silver ion.” 4th International Conference on Ultrafine Grained and Nano-Structured Materials (UFGNSM2013), Tehran, Iran, November 2013.
- 46) V. Moghimifar, A. Shokouhi, **Raisi A.** and Aroujalian A., “Surface modification of polyethersulfone ultrafiltration membranes by coating TiO₂ nanoparticles.” The 8th International Chemical Engineering Congress & Exhibition (IChEC 2014), Kish, Iran, 24-27 February, 2014.

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- 47) A. Shokouhi, **Raisi A.**, Pazuki G. and Aroujalian A., "Prediction of sorption behavior of ethanol/water mixtures into polydimethylsiloxane membrane in pervaporation process using UNIQUAC model and genetic algorithms." The 8th International Chemical Engineering Congress & Exhibition (IChEC 2014), Kish, Iran, 24-27 February, 2014.
- 48) M. Talebian, A. Aroujalian and **Raisi A.**, "Fabrication of mixed matrix membranes for separation of carbon dioxide/hydrogen mixtures." The 8th International Chemical Engineering Congress & Exhibition (IChEC 2014), Kish, Iran, 24-27 February, 2014.
- 49) Y. Fathi, **Raisi A.**, A. Aroujalian and M. Talebian, "Effect of crosslinking method on separation performance of polyvinyl alcohol pervaporation membrane for ethanol dehydration." The 8th International Chemical Engineering Congress & Exhibition (IChEC 2014), Kish, Iran, 24-27 February, 2014.
- 50) K. Zarshenas, **Raisi A.** and A. Aroujalian, "Surface modification of dual-layer polyamide6/polyethersulfone membrane by corona air plasma for gas separation." 2nd International Conference on Chemistry, Chemical engineering and Chemical process (ICCC2014), Istanbul, Turkey, 10-11 July, 2014.
- 51) Y. Fathi Sola, **Raisi A.** and Aroujalian A., "Effect of nano NaX zeolites on pervaporation dehydration of alcohols." 5th International Congress on Nanoscience & Nanotechnology (ICNN2014), Tehran, Iran, 22-24 October 2014.
- 52) V. Moghimifar, **Raisi A.** and Aroujalian A., "Oily waste water treatment by nano titanium dioxide modified polyethersulfone membranes." 5th International Congress on Nanoscience & Nanotechnology (ICNN2014), Tehran, Iran, 22-24 October 2014.
- 53) S. Nabati Shoghl, Aroujalian A. and **Raisi A.**, "Gas Separation Performance of Nano NaX Zeolite-Polyethersulfone Mixed Matrix Membranes." 5th International Congress on Nanoscience & Nanotechnology (ICNN2014), Tehran, Iran, 22-24 October 2014.
- 54) S. Afkham, Aroujalian A. and **Raisi A.**, "Fabrication of nano silver/polyethersulfone microfiltration membrane with antibacterial activity." 5th International Congress on Nanoscience & Nanotechnology (ICNN2014), Tehran, Iran, 22-24 October 2014.
- 55) M. Hasanizadeh, Aroujalian A. and **Raisi A.**, "Removal of copper from aqueous solution using PES/X nanocomposite nanofiber membrane prepared by electrospinning." 5th International Congress on Nanoscience & Nanotechnology (ICNN2014), Tehran, Iran, 22-24 October 2014.
- 56) Afkham, S., Raisi, A. and Aroujalian, A., Silver Nanoparticles Coated Polyethersulfone Microfiltration Membranes with Anti-biofouling Efficiency, Asian Nano Forum Conference 2015 (ANFC2015), Tehran, Iran, 8-11 March 2015.

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- 57) Zarshenas, K., **Raisi, A.** and Aroujalian, A., Mixed Matrix Membranes of PEBAX Zeolite X Nanoparticles for CO₂/N₂ Gas Separation, an, 8-11 March 2015.
- 58) Ayobi, S., Aroujalian, A. and **Raisi, A.**, Preparation of thin film composite polyamide membrane by a dip coating method, 12th International Conference on Membrane Science & Technology (MST2015), Tehran, Iran, 1-3 November 2015.
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