

## **Farzin Zokaee Ashtiani**

*Associate Professor*

*Chemical Engineering Department*

Amirkabir University of Technology (Tehran Polytechnic), Hafez ave.,

Tehran 15914, Iran

Phone: +98(21)64543124, Fax: +98(21)6405847

E-mail: [Zokaee@aut.ac.ir](mailto:Zokaee@aut.ac.ir)

### **Education:**

High School: Math. Dip., Shahid Bahonar, Tehran, Iran, 1989

B. Sc.: Chem Eng., Amirkabir University of Technology, Tehran, Iran, 1994

M. Sc.: Chem Eng., Amirkabir University of Technology, Tehran, Iran, 1996

Ph. D.: Chem Eng., Amirkabir University of Technology, Tehran, Iran, 2001

### **Employment:**

Amirkabir University of Technology, Associate Professor of Chem. Eng., 2002

Head of Graduate Studies

### **Research Field:**

Mass Transfer

Separation Processes

    Membrane Separations

    Tower Packings and Packed Towers

Food Processes

### **Consultation:**

Consultant of Razi Research Institute, Hesarak, Karaj, Iran, 1997-1998

Consultant of Energy and Process Design Center, Amirkabir University of Technology,  
Tehran, Iran, 1998

Consultant of Tehran Ceramic Industries Co., Tehran, Iran, since 1999-2004

### **Membership:**

Member of Iranian Association of Chemical Engineers

Member of Iranian Food Science and Technology Association

### **Courses Taught:**

*Undergraduate:*

Mass Transfer

Heat Transfer 1

Material and Energy Balances

Unit Operation

Food process Engineering

Heat Transfer Lab.  
Unit Operation Lab.

*Graduate:*

Bioseparations  
Advanced Food Processes  
Advanced Separation Processes in Food Industry  
Advanced Mass Transfer

### **Books:**

Editor: "Tower Packings and Packed Towers" Tehran Ceramic Industry Co. 2001.

### **Journal Publications:**

- Zokaee, F., Kaghazchi, T. and Zare, A., Cell harvesting by microfiltration in a deadend system, *Process Biochemistry*, 34, 803-810 (1999).
- Kaghazchi, T., Zokaee, F. and Zolfagari, Application of Ultrafiltration in Sugar Cane Juice Refining, *Amirkabir*, 44, 563-569 (2000).
- Kaghazchi, T., Zokaee, F. and Zare, A., Membrane fouling in microfiltration used for cell harvesting, *J. of Thermal Science*, Vol.10, No.1, 32-37 (2001).
- Zokaee, F., Kaghazchi, T. and Zare, A., Soleimani, M., Isomerization of lactose to lactulose - study and comparison of three catalytic systems, *Process Biochemistry*, 37, 629-635 (2002).
- Zokaee, F., Kaghazchi, T. and Zare, A., Soleimani, M., Isomerization of lactose to lactulose using sweet cheese whey ultrafiltrate, *J. of The Chinese Institute of Chemical Engineers*.33(3) 307-313 (2002).
- Zokaee, F., Kaghazchi, T. and Zare, A., Soleimani, M., Alkali-catalyzed isomerization of lactose to lactulose: study of reaction parameters and purification methods, *Iranian Journal of Chemical Engineering*. Vol. 1, No.1, Spring (2004).
- Hashemi, A., Zokaee, F., The isomerization kinetics of lactose to lactulose in the presence of sodium hydroxide at constant pH, *Scandinavian journal of food & nutrition*, Volume 50, supplement 1/2006.
- Ansari, S., Zokaee, F., Kaghazchi, T., Masoodi, S., Study of microfiltration of sweet cheese whey, *AFINIDAD*, Vol. 63, No.524, 303-307, 2006.
- Shafaei, A., Ashtiani, F.Z. Kaghazchi, T., Equilibrium studies of the sorption of Hg (II) ions onto chitosan, *Chemical Engineering Journal* ,133(2007) 311-316.
- Faravash, R. S., Zokaee, F., The effect of pH, ethanol volume and acid washing time on the yield of pectin extraction from peach pomace, *International Journal of Food Science and Technology*,42,1177-1187,(2007).
- Faravash, R. S., Zokaee, F. The influence of acid volume, ethanol-to-extract ratio and acid washing time on the yield of pectic substances extraction from peach pomace , *Food Hydrocolloids*, 22(2008)196-202
- Shahbazian, N., Zokaee Ashtiani, F., Bonakdarpour, B., Statistical optimization of the medium components for the production of protopectinases by *Bacillus subtilis*, *Food Science and Biotechnology*, 18(2009)
- Ghorbanpur M, Zare Mirakabadi A , Zokaee F , Zolfagarrian H , Rabee H, Purification and partial characterization of a coagulant protease from the venom of the iranian snake *Agkistrodon halys*, *J. Venom. Anim. Toxins*, 15(3)411-423,2009.

- Ghorbanpur M, Zare Mirakabadi A , Zokaee F , Zolfagarrian H , Identification and partial purification of an anticoagulant factor from the venom of the Iranian snake *Agkistrodon halys*, *J. Venom. Anim. Toxins*, 16(1) 96-106, 2010
- Habibi, A., Aurojalian, A., Raisi, A., Zokaee, F., Influence of operating parameters on clarification of carrot juice by microfiltration process, *Journal of Food Process Engineering* 2010.
- Fattahi, H., Zokaee Ashtiani, F., Bonakdarpour, B., Hashemi A., Khatami, H., Enzymatic synthesis of lactulose by commercial  $\beta$ -galactosidase from *Kluyveromyces lactis*, *AFINIDAD, LVXI*, 546 149-153, 2010.
- Hashemi A., Zokaee Ashtiani, F., The Isomerization Kinetics of Lactose to Lactulose in the Presence of Sodium Hydroxide at Constant and Variable pH. *Food and Bioproducts Processing*, **88** (2-3) 181-18, 2009.
- Rezaei, H., Zokaee Ashtiani, F., Foladi, A., Effects of operating parameters on fouling mechanism and membrane flux in cross-flow microfiltration of whey, *Desalination*, 274, 262-271, 2011.
- Ameli, F., Dabir, B., Zokaee Ashtiani, F., Aggregation Mechanism of Bovine Serum Albumin Based on Collision Factor by the Population Balance Conservation Law, *Korean J. Chem. Eng.*, 28(5), 1304-1310, 2011.
- Veladat, R., Zokaee Ashtiani, F., Rahmani, M., Miri, T., Review of numerical modeling of pasta drying, a closer look into model parameters, *Asia-Pacific Journal of Chemical Engineering*, 2011. (In press).
- Ziari, H. , Zokaee Ashtiani, F., Mohtashamy, M., Comparing the effectiveness of processing parameters in pectin extraction from apple pomace., *AFINIDAD, LVXI*, 549, Sep-Oct 374-379, 2010.
- Pajoum Shariati, R., Bonakdarpour, B., Zare, N., Zokaee Ashtiani, F., The effect of hydraulic retention time on the performance and fouling characteristics of membrane sequencing batch reactors used for the treatment of synthetic petroleum refinery wastewater, *Bioresource Technology* 102, 7692–7699, 2011.
- Bagherian, H., Zokaee Ashtiani, F., Fouladi, A., Comparisons between conventional, microwave- and ultrasound-assisted methods for extraction of pectin from grapefruit, *Chemical Engineering and Processing* 50 (2011) 1237– 1243.
- Ghorbanpur M, Zokaee Ashtiani, F., Zare Mirakabadi A , Zolfagarrian H, Purification and partial characterization of a thrombin-like enzyme (AH144) from venom of Iranian snake *Agkistrodon halys* Iran. *J. Chem. & Chem. Eng.*, 31, 2012. (in press)
- Sharififard, H., Zokaee Ashtiani, F., Soleimani, M., Adsorption of palladium and platinum from aqueous solutions by chitosan and activated carbon coated with chitosan, *Asia-Pac. J. Chem. Eng.* , 2012. (in press)
- Sharififard, H., Soleimani, M., Zokaee Ashtiani, F. Evaluation of Activated Carbon and Bio-polymer Modified Activated Carbon Performance for Palladium and Platinum removal. *Journal of the Taiwan Institute of Chemical Engineers*, 2012. (in press)

### **Conference Publications:**

- Zokaee, F., Kaghazchi, T. and Zare, A., Cell harvesting by microfiltration, *2<sup>nd</sup> Iranian Congress of Chemical Engineering*, Feb. 1997, Iran.
- Kaghazchi, T., Zokaee, F. and Zare, A., Application of microfiltration in cell harvesting, *ACHEMASIA '98*, China.

- Kaghazchi, T., Zokae, F. and Zare, A., Membrane fouling in microfiltration used for cell harvesting, *Millennium International Symposium on Thermal and Fluid Sciences (Thermal & Fluid 2000)*, China.
- Kaghazchi, T., Zokae, F. and Zare, A., Alkali-catalized isomerization of lactose to lactulose, *The Second World Engineering Congress*, July 2002, Malaysia
- Kaghazchi, T., Zokae, F. and Zare, A., Preparation of lactulose from cheese whey ultrafiltrate, *Chisa 2002*, Aug. 2002, Czech.
- Zokae, F., Kaghazchi, T., Zare, A. and Soleimani, M., Study on Isomerization of lactose to lactulose, *13<sup>th</sup> National Iranian Congress of Food Industry*, Oct 2002, Iran.
- Zokae, F., Kaghazchi, T., Zare, A. and Soleimani, M., Study on Reaction of lactose to lactulose using cheese whey. *7<sup>th</sup> Iranian Congress of Chemical Engineering*, Oct 2002, Iran.
- Ansari, S., Zokae, F., Kaghazchi, T., Masoodi, S., Study of microfiltration of sweet cheese whey. *9<sup>th</sup> Iranian Congress of Chemical Engineering*, Nov 2004, Iran.
- Shafae, A., Zokae, F., Kaghazchi, T., Equilibrium studies of the sorption of Hg (II) ions onto chitosan. *9<sup>th</sup> Iranian Congress of Chemical Engineering*, Nov 2004, Iran.
- Zokae, F., Kaghazchi, T., Ansari, S., Masoodi, S., Membrane fouling in microfiltration of sweet cheese whey., *ECOSUD 2005*, May 2005, Spain.
- Zokae, F., Kaghazchi, T., Shafae, A., Equilibrium studies of the sorption of Hg (II) ions onto chitosan. *5<sup>th</sup> European meeting on Environmental Chemistry*, Dec. 2004.
- Shafae, A., Zokae, F., Kaghazchi, T., Kinetics study of the sorption of Hg (II) ions onto chitosan. *15<sup>th</sup> National Iranian Congress of Food Industry*, April 2005, Iran.
- Zomorodi, A., Zokae, F., Supercritical extraction in food industry *15<sup>th</sup> National Iranian Congress of Food Industry*, April 2005, Iran.
- Karimi, R., Bonakdarpour, B., Zokae, F., Xylitol production from hemicellulose by *Debarmyces hansenii* CBS767. *15<sup>th</sup> National Iranian Congress of Food Industry*, April 2005, Iran.
- Hashemi, A., Zokae, F., The isomerization kinetics of lactose to lactulose in the presence of sodium hydroxide at constant pH, *LMC International Food Congress*, March 15-16 2006, Denmark.
- Hashemi, A., Zokae, F., Effect of Temperature and pH on lactose isomerization to lactulose in presence of sodium hydroxide, *16<sup>th</sup> National Iranian Congress of Food Industry*, 11-13 April 2006, Iran.
- Hashemi, A., Zokae, F., Kinetics of lactose isomerization to lactulose in the presence of sodium hydroxide at constant pH, *16<sup>th</sup> National Iranian Congress of Food Industry*, 11-13 April 2006, Iran.
- Faravash, R. S., Zokae, F., Influence of initial pH and acid-washing time on the yield of pectin extraction from peach pomace, *16<sup>th</sup> National Iranian Congress of Food Industry*, 11-13 April 2006, Iran.
- Akbari, A., Zokae, F., Ghomashchi, T, Membrane Separation Technology in the Starch Processing Industry, *16<sup>th</sup> National Iranian Congress of Food Industry*, 11-13 April 2005, Iran.
- Faravash, R. S., Zokae, F., An experimental investigation on the effect of concentration and pH on the yield of pectin extraction from peach and carrot pomace, *First Azad University Chemistry and industry conference*, December 14, 2005, Eslamshahr, Iran

Faravash, R. S., Zokae, F., Effect of ethanol ratio and pectin concentration on the precipitating pH and the yield of pectin extraction from peach pomace, *8th International Hydrocolloids Conference*, June 18-22, 2006 in Trondheim, Norway.