

# Curriculum Vitae

**Name:** Zaidoon Mohsin Shakor

**Address:** Baghdad/ Al-Waziria

**Date of Birth:** 1975/6/21 Baghdad

**Gender:** Male

**Marital status:** Married having three children

**Languages:** Arabic, Turkish, English and France

**Nationality:** Iraqi

**E-mail:** dr\_zaidoon@yahoo.com

**Mobile:** 00 964 7709436769  
00 964 7901797890



## Educations:

- ◆ Ph.D. in Chemical Engineering 2004  
Thesis: Dynamics and Simulation of Azeotropic and Extractive Batch Distillation.
- ◆ M.Sc. in Chemical Engineering 1999  
Thesis: Dynamics, Simulation and Control of Batch Cooling Crystallizer.
- ◆ B.Sc. in Chemical Engineering 1997

## Training Courses

- ◆ Scientific Visit and Training at the Department of Chemical and Biochemical Engineering, Missouri University of Science and Technology, United State, titled “Modeling and Simulation of Multi-Phase Reactors”, (December 4, 2014 – January 3, 2015).

## Professional Experience

- December 2012 - Up to date, Assistant Professor, Chemical Engineering Department, University of Technology.
- July 2004 - December 2012, Lecturer, Chemical Engineering Department, University of Technology.
- April 2002 - July 2004, assistant lecturer, Chemical Engineering Department, University of Technology.

## Research Activities:

- Member in research unit of chemical engineering department specialized in reactive distillation (2008-1012).
- Contraction with ministry of higher education to study the control of reactive distillation columns (2010).
- Consultant at the Centre of research and development of oil / oil ministry on the issue of:-
  - 1) Designing flare gas recovery system for Al-Shibba Refinery.
  - 2) Re-Design of the modern refineries for the distillation of heavy Iraqi crude oils (since March 2016).

**Specially interested in:**

- Processes modeling, simulation, optimization and control.
- Azeotropic, extractive and reactive distillation columns.
- Fixed bed, trickle bed and monolithic reactors.
- Parameter estimation and evaluation of reaction kinetics.
- Applying modern optimization techniques in chemical engineering.
- Computational fluid dynamics (CFD) applications in chemical engineering.

**Employment:**

- Member of the staff of Chemical Engineering Department, University of Technology, Baghdad, April 2002 up to date.
- Member of undergraduate examination comity of Chemical Engineering Department, University of Technology, Baghdad, 2002 - 2008.
- Director of the Statistics Unit, 2008 – 2010.
- Member of postgraduate examination comity of Chemical Engineering Department, University of Technology, Baghdad, 2010 - 2012.
- Director, Division of Scientific Committees, 2012.
- Assistant dean of college for Administrative Affairs 2012- 2017.
- Director of Industrial Design and Construction Research Unit 2017-up to date

**Memberships:**

Organization	Role	Member Since
Iraqi Engineers Union	Member	22/10/1997

**Skills:**

Skill	Level	Years Practiced
Processes control	Very Good	2002-2017
Programming by Visual Basic	Good	2004-2013
Programming by Matlab	Excellent	2004-2017
Aspen Hysys	Good	2015-2017
Numerical Analysis	Very Good	2010-2017
Ansys-Fluent	Good	2016-2017

**Courses Taught:**

Course	Years Practiced
Optimization ( <b>Fourth Class</b> )	2002-2003
Process Control Labrotary ( <b>Fourth Class</b> )	2002-2004
Computer ( <b>First Class</b> )	2003-2004
Computer Programming ( <b>Second Class</b> )	2004-2014
Process Control ( <b>Fourth Class</b> )	2013-2017
Numerical Analysis ( <b>Third Class</b> )	2014-2016
Numerical Analysis ( <b>M.Sc. Laboratory</b> )	2010-2017
Numerical Analysis ( <b>M.Sc.</b> )	2015-2016

Process Control (M.Sc.)	2017-2018
Process Modeling and Numerical Analysis (M.Sc.)	2017-2018

### Post Graduate Theses Supervised:

#### Ph.D. Thesis:

- Adel A. Shuhaib Al-Kareemawi, "α-Methyl Styrene Hydrogenation In a Batch and Single Channel Monolithic Reactors", Ph.D. Thesis, University of Technology, Chemical Engineering Department , November 2008.

#### M.Sc. Thesis:

- Mohammed Z. Mohammed, "Mathematical Modeling and Simulation of MTBE Production by Reactive Distillation", M. Sc. Thesis University of Technology, Chemical Engineering Department, February 2009.
- Mohamad S. Baker, "Dynamic Simulation and Optimization of Reactive Distillation", M. Sc. Thesis, University of Technology, Chemical Engineering, 2012.
- Mohamad O. Abdul-Sttar, "Optimization of Distillation Column using Genetic Algorithm and Aspen plus", M. Sc. Thesis, University of Technology, Chemical Engineering, 2013.
- Huda Ammer Abd-Al Kader, "Computer Aided Design and Optimization of a Petochemical Complex", 2014.
- Ayman Fawzy Zoain, "Application of LabView and Genetic Algorithm for controlling of Plate Heat Exchanger", 2014.
- Nasma Balasm Ahmed, "Modeling and Simulation of Inverse Three Phase Fluidized Bed Characteristics Using Matlab" 2015.
- Anfal Hayder Salih, "Applying Modern optimization Techniques in Prediction of Reaction Kinetics of Iraqi Refinery's" 2016.
- Hayder Hashim, "Modeling and Optimization of Heavy Metal separation by Adsorption".

#### M.Sc. Thesis under Supervision:

- Zainab Kauaja, "Experimental and Theoretical Study of Gas-Liquid-Solid Fluidized Bed".

#### Higher Diploma Thesis under Supervision:

- Suha Sami Kasm, "Prediction of Reaction Kinetics for Heavy Naphtha Hydrotreating".
- Azad Mustafa Jawhar, "Applying Hysys for Simulation and Optimization of Natural Gas Sweetening by Amine Process)".

#### Papers Published:

- Safa A. Al-Naimi , Ghanim M. Alwan, **Zaidoon M. Al-Aubaidy**, "Dynamic and Control of Batch Cooling Crystallizer", First Scientific Conference of the College of Engineering, University of Tikrit, 1999.
- **Zaidoon M. Shakoor**, Safa A. Al-Naimi, Nada B. Al- Nakash, "Dynamic Simulation of Batch Azeotropic Distillation", Eng.& Technology, Vol.25, No.6,757-774, 2005.
- **Zaidoon M. Shakoor**, Safa A. Al-Naimi, Nada B. Al- Nakash, "Mathematical Modeling of Multi Component Batch Extractive Distillation", Eng.& Technology, Vol.25, No.6,757-774, 2007.

- Majid S. Radhaa, Khalid A. Sukkar, Jamal M. Ali, **Zaidoon M. Shako**r, Niran Manwel, "Hydrodynamics, Mass and Heat Transfer in Reactive Distillation", Al-khwarizmi Eng. J, Vol.4, No.2 , pp 1-9, 2008.
- **Zi**adoon M. Shakor, and Khalid A. Sukkar "Dynamic Simulation of Semi-Batch Catalytic Distillation Used for Esterfication Reaction" Eng. & Technology,. no. 7, vol 26,777-796, 2008.
- **Zaidoon M. Shako**r , Mumtaz A. Zablouk & Adel A. Shuhaib , "Reaction Kinetic of  $\alpha$ -methylstyrene (AMS) Hydrogenation", Eng. & Tech. Journal ,Vol.27, No.7,1301-1316, 2009.
- Nada B. Al-Nakash, Neran K. Ibrahim, Salah S. Ibrahim, **Zaidoon M. Shako**r" Comparison between Equilibrium Model and Rate Base Model for Simulation Batch Azeotropic Distillation",Eng. & Tech. Journal ,Vol.27, No. 16 ,3129-3154, 2009.
- Zahra'a F. Zuhwar, **Zaidoon M. Shako**r "Control of Neutralization process for Change over Titration Curve Using Model of Strong Base-wak Acid", Second Scientific Conference of the College of Engineering, University of Al-Qadisiya, 156-178, 2009.
- **Zaidoon M. Shako**r, "Mathematical Modeling and Simulation of the Dehydrogenation of Ethyl Benzene to Form Styrene Using Steady-State Fixed Bed Reactor" Tikrit J. of Eng. Sciences, Vol.13, No.1, P.35-62, 2010.
- Adel A. Shuhib, Jenan A. Al-Najar, **Zaidoon M. Shako**r, Lange R. , "Modeling of Single Channel Monolithic Reactor with the Single Pass Flow Operation System", Eng. & Tech. Journal ,Vol.28, No. 11, 2010.
- Jenan A. Al-Najar, Ramzy S. H, **Zaidoon M. Shako**r, "Removal of Cadmium (II) onto granular Activated Carbon and Kaolinite using Batch Adsorption",Eng. & Tech. Journal ,Vol.28, No. 10 ,2070-3080,2009.
- **Zaidoon M. Shako**r, "Prediction Reactive Residue Curve Map (rRCM) for Quaternary System", First scientific conference of modern technologies in the oil refining and gas, Baghdad 2011.
- **Zaidoon M. Shako**r, "Estimation of Kinetic Parameters of Complex Reactions by MATLAB Software ", First scientific conference of modern technologies in the oil refining and gas, Baghdad 2011.
- **Zaidoon M. Shako**r, Khalid A. Sukkar., Mohammed S. Baqer, "Reaction Kinetics of Acetic Acid and n-Butanol Esterification Catalyzed by Dowex 50 Catalyst., Eng. & Tech. Journal ,Vol.29 , No.10 , 2011.
- Ghanim M. Alwan, **Zaidoon M. Shako**r, Muttha.S.Murttha, "Optimal Control of PH for a Wastewater Treatment Unit Using LABVIEW Technique" Student Poster session, AIChE, 2011.
- **Zaidoon M. Shako**r, "Catalytic Reforming of Heavy Naphtha, Analysis and Simulation", Diyala Journal of Engineering Sciences, Vol. 04, No. 02 , pp. 86-104, December 2011.
- Saad. R. Sultan, W.J.N. Fernando, **Zaidoon. M. Shako**r, S.A. Sata, "Modeling of Particles Growth in Styrene Polymerization, Effect of Particle Mass Transfer on Polymerization Behavior and Molecular Weight Distribution" Malaysian Polymer Journal, Vol. 6, No. 2, p 119-134, 2011.
- Intisar H. Aljumiliy, Farah T. Al-Sudani, **Zaidoon M. Shako**r, "Three - Way- Catalyst-Monolith Converters (Pt- Loaded) for Gasoline Engine: Experimental Study and Modeling", Jordan six chemical engineering conference, 2012.
- **Zaidoon M. Shako**r, "Optimization of Al-Doura Catalytic Naphtha Reforming Process Using Genetic Algorithm" Eng. & Tech. Journal, Vol.31, Part (A), No.7, 2013.

- Safa A. Al-Naimi, **Zaidoon M. Shakoor** and Mohammed O. Abdul-Satar ,” Optimization of Demethanizer Distillation Column using Genetic Algorithm” Second scientific conference of modern technologies in the oil refining and gas, Baghdad 2013.
- Ramzy. H. Saihod, **Zaidoon M. Shakoor**, Abbas A. Jawad,“Prediction of Reaction Kinetic of Al-Doura Heavy Naphtha Reforming Process Using Genetic Algorithm” Al-Khwarizmi Engineering Journal, Vol. 10, No. 1, P.P. 47- 61(2014).
- **Zaidoon M. Shakor**, Jenan A. AL Najara, Asawer A. Alwasiti ,”Comparison between Neural Network and Genetic Algorithm in Prediction Adsorption Capacity of Natural Sorbent”, Xth International Statistics Day Conference, University of Giresun, Ordu, Turkey (2016).
- Khalid H. Rashid, **Zaidoon M. Shakor**, & Ayad B. Ahmed " Modelling and Optimization of Corrosion Inhibition of Mild Steel in Phosphoric Acid by Red Pomegranate Peels Aqueous Extract", Journal of Engineering,11(23),(2017).
- Zaidoon M. Shakor, Salah M. Ali, Harith A. Mohammed, Talal F. Hassan, Optimization of Refining Strategy to Fractionate Various Iraqi Crude Oils into Lighter Fractions, Journal of Petroleum Research & Studies, 20, (2018).
- Salah M. Ali, Hareth Sh. Moshref , Saad K. Ibrahim, Harith A. Mohammed, **Zaidoon M. Shakor**, Shaker Mohmud,” Studies and Modeling for Upgrading Units for Heavy Oil Refineries”, Journal of Petroleum Research & Studies,19,(2018)
- **Zaidoon M. Shakoor** and Aymen F. Zween, Application of LabVIEW and Genetic Algorithm for controlling of Plate Heat Exchanger, International Journal of Advances in Scientific Research and Engineering (ijasre), Volume 4, Issue 11,(2018).
- Adnan A. AbdulRazak, **Zaidoon Mohsin Shakor**, Sohrab Rohani, “Optimizing Biebrich Scarlet removal from water by magnetic zeolite 13X using response surface method”, Journal of Environmental Chemical Engineering 6, 6175–6183,(2018).
- Zainab Abdulameer Joodia, **Zaidoon M. Shakoor**, Amer A. Abdul- Rahmana, Computational Fluid Dynamic Simulation and Validation Bed Expansion of Three-Phase Co-Current Fluidized Bed, Journal of University of Babylon for Engineering Sciences, Vol. (26), No. (6): 2018.

#### **Papers Under-Publishing:**

- **Ziadoon M. Shakor**, and Mohammed Z. Mohammed, “Reactive Distillation Simulation for MTBE Production”.
- Safa A. Al-Naimi , **Zaidoon M. Shakor**, and Huda Aamer ,”Simulation and Optimization of Ethane Cracking Process Using ASPEN PLUS and MATLAB”.
- **Zaidoon M. Shakor**, and Aymen F. Zween,” Applying Genetic Algorithm in Controlling the Plate Heat Exchanger”

#### **Invited Lectures and Seminars**

- Seminar Title “Application of genetic algorithm in optimization and parameters estimation of various chemical engineering systems”, Chemical engineering Department, University of Technology.

#### **Conferences and Training**

- Tikrit First Chemical Engineering Conference, Iraq, Tikrit University.
- Tikrit Second Chemical Engineering Conference, Iraq, Tikrit University.
- Second Scientific Conference for Engineering Universities, Iraq, Al-Qadisia, (2009).

- First Scientific Conference on Modern Technologies in Oil & Gas Refining, University of Technology – Iraq (2011)
- The Sixth Jordan International Chemical Engineering Conference (JICHEC 06), Amman-Jordan.
- Second Scientific Conference on Modern Technologies in Oil Refining (MTOR 2013), Iraq, Baghdad (14-15 may 2013).
- Modern refineries in twenty-first century Seminar, Iraq, Diwaniya University (2014).
- X<sup>th</sup> International Statistics Day Conference, University of Giresun, Ordu, Turkey (2016).