# Curriculum Vitae

## **1-Personal Information**

Name:Mohammaf Fadhil Abid Affiliation: Department of Chemical Engineering, University of Technology, email: <u>80005@uotechnology.edu.iq</u> Mob. No.: +9647709229217

Date of Birth: 1953 Place of Birth: Baghdad Nationality: Iraqi Marital Status: Married



2-Scientific Rank:

- Prof.Dr. In Academic Field
- Chief of Researcher in Research Field
- Expert in Industry Field

## **3-Research Interests:**

- -Hydrodynamics and kinetics of multiphase catalytic reactors.
- - Wastewater treatment using solar photocatalysis.

## **4-Education**

Date	Discipline	Degree	Institution	Thesis Title
1989	Chemical Engineering	MSc	University of Technology	Modeling and Design of Continuous Moving-bed Chromatographic System
2002	Chemical Engineering	PhD	University of Technology	Mathematical Model and Experimental Measurements in a Falling-film Reactor

## 5-Postdoctoral Training(ifavailable)

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## **6-Management Posts**

- Head of Unit Operation Branch (2006-2012)
- Head of Industrial and Petroleum Pollution Engineering Branch (2015-)
- Head of Pilot Researchs Unit (2014-)

## 7-Grants and Fellowships

- 1- Grant from Research and Development Diroctrate/ Ministry of Higher Educcation (2008)
- 2- Grant from Petroleum Research and Development Center/Ministry of Oil (2012)
- 3- Grant from Research and Development Diroctrate/ Ministry of Higher Educcation (2013)
- 4- Grant from Petroleum Research and Development Center/Ministry of Oil (2014)
- 5- Grant from Petroleum Research and Development Center/Ministry of Oil (2015)
- 6-

## 8-Academic Experience

## 1-Undergraduate Level

- Teaching of "Reactor Design" for Third Year-Class
- 2-Postgraduate Level
- Teaching of "Heterogeneous Reactors" for MSc Course-Petroleum Refinery Branch
- Teaching of"Reactor Design" for MSc Course- Chemical Processes Engineering Branch.
- Teaching of "Advanced Reactor Design" for PhD course

## 9-Employment History

- 1- Head of Air Separation Plant (1980-1983)
- 2-  $Head ext{ of Dilute nitric acid plant (1983- 1985) } 2$ 
  - 3- Head of Ammonium nitrate prillsplant (1985-1986)
  - 4- Head of Process Design Department (1989- 2003)
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## **10-License/Certification** ()

- 1- Certification from IKA company/Germany on 1990
- 2- Certification from Research and Development Directorate/ Ministry of Higher Education on 2013
- 3- Certification from Axens Company/France on 2014

### **11-Honors and Distinctions**

- Honor from the University of Technology due to the 1<sup>st</sup> Scientific Conference for Modern Technology for Petroleum Refining, 25-27 April 2011
- 2- Honor from the Jordanian Association of Chemical Engineers due to the Sixth Jordan International Chemical Engineering Conference (JIChEC06), Amman-Jordan 12-14 March, 2012
- 3- Honor from the University of Technology due to the 2<sup>nd</sup> Scientific Conference for Modern Technology for Petroleum Refining, 14-16 May,2013
- 4- Honor from theNorth Petroleum Company/Ministry of Oil due to the 1<sup>st</sup> Conference on Environment and Petroleum, 14-16 Dec., 2013
- 5- Honor from the University of Technology due to the 1st International Scientific Conference on Environment and Sustainable Development (ISCESD 2013)29-30 Dec, 2013
- 6- Honor from the Jordanian Association of Chemical Engineers due to the7th Jordan International Chemical Engineering Conference (JIChEC07), Amman-Jordan 4-6 Nov.,2014
- 7- Honor from TMREES15 due to the International Conference on Technologies and Materials for Renewable Energy, Environment andSustainability, April 17-20, 2015, Beirut-Lebanon
- 8- Honor from the University of Technology due to the 1<sup>st</sup> Conference of Postgraduate Researches on Impacts of Postgraduate Researches in Chemical Engineering on the Development of Chemical and Petroleum Industries Horizons, 18-19 May 2015

### 12-Skills and Qualifications (Language and computer)

- 5- English Language
- 6- Microsoft word, Excel, and Staistica

## 13-Publications/ Books

**1-Supervision** 

• Supervising on different thesis for M.Sc. student, some of them as follows:-

1- Dema, H.K.,(2006) Mass Transfer and Hydrodynamics in Impinging Jet Bubble Column ,University of Technology.

2- Muhsen, H.A.(2007) Liquid Dispersion in Bubble Column Using Air-Water System, University of Technology.

**3-** Abdulla, H.M.(2008) Hydrodynamics of Two Phase Flow for Coalescing and Noncoalescing Systems, University of Technology.

4- Toma, F.S. (2008) Scale Effects on the Hydrodynamics of Bubble Column, University of Technology.

5- Mahmmod A.A.(2009) Hydrodynamics Characteristics of a Gas-Liquid-Solid Fluidized Bed Containing a Binary Mixture of Particles, University of Technology.

6- Hadi A. A.(2010) Hydrodynamic Effects of Foam Contol in Three Phase Bubble Column, University of Technology.

7- Muhssen A. A. (2011) Dye Removal from Wastewater using Membrane Technology, University of Technology.

8- Ahmed, L.S. (2012) Hydrodynamic and Kinetic Study of Phenol Removal from Wastewater in a Trickle Bed Reactor, University of Technology.

9- Hamza, N. H.,(2013) Removal of Methyl Violet Dye from WastewaterUsing combined Solar Photocatalysis-Membrane Separation Technology, University of Technology.

10- Hussein, H., (2013) Hydrodynamic and Kinetic Study in an Ebullated Bed Reactor for H-Oil Unit, University of Technology.

11- Faleh, A., (2014) Experimental Study for Removal of Harmful Organics from Refinery Wastewater using Photocatalytic Reactor, University of Technology. 12- Adnan, L., (2014) Experimental and Analysis Study of Catalytic Oxidation Process for Treatment of Wastewater from Petroleum Refinery, University of Technology.

13- Khalid, M., (2015) Experimental Study on Catalyst Deactivation by Nitrogen Compounds in Hydrprocessing reactors, University of Technology.

14- Hamed, W., (2016) Studying the performance of a hydrotreating process for a mixture of gas oil and Lighter fractions, University of Technology.

## 2-Research Under publication

1- **Mohammad F. Abid,** Shakir M. Ahmed, Halah H. Hassan, Salah M. Ali" Hydrodynamic Study of an Ebullated-bed Reactor in the H-Oil Process" the Iranian Journal of Science and Technology (Sciences), In press **3- Mohammad F. Abid,** Haider M. Khudheir "Kinetic study and Modeling of Heavy Naphtha Catalytic Reforming process in AL-Daura Refinery" Journal of Petroleum Research and Studies, Petroleum Research and Development Center, In press

### 2- Accepted Manuscripts

#### 3- Published work

1- Safa A. Abdulla, Isam K. Halabia, **Mohammad F. Abid** "Modeling of a Sulfonation Reactor in Detergent Plant", published in the "IRAQI JOURNAL OF CHEMICAL ANDPETROLEUM ENGINEERING, 2002, Vol. 3, September, 45-53.

2- Mohammad F. Abid, Safa A. Abdulla, Isam K. Halabia"Modeling and Experimental Measurements in a Falling Film Reactor", Tikrit journal of Engineering sciences, Vol.12, No.2, (48-81), May (2005)

**3-Mohammad F. Abid** "A Modified Correlation to Evaluate Liquid Mass Transfer Coefficient in an Impinging – Jet Tall Bubble Columns", Tikrit journal of Eng. Science, Vol.13, No.3, (54-77),October 2006

4-**Mohammad F. Abid**, Hythem K. Demah "Study of Hydrodynamics and Mass Transfer in Impinging-Jet Bubble Column", Tikrit journal of Eng. Sciences, Vol.14, No.2, (102-135), June (2007)

5-**Mohammad F. Abid** "Stability analysis in a Falling Film Reactor" Tikrit journal of Eng. Sciences, Vol.15, No.1, (1-16), March (2008).

6- Mohammad F. Abid, Hayder M. Abdul-Karim "Experimental Study of Liquid Dispersion in Bubble Column"Diyala Journal of Engineering Sciences, Vol. 1, No.1, December 2008.

**7-Mohammad F. Abid**, AreejDelef "Experimental Study of Foaming Control in a Hydrocracking Reactor" Tikrit Journal of Eng. Sciences, Vol.16,No.1, (90-110), March (2009).

8-Mohammad F. Abid, Shakir M. Ahmed, Hussein M. Salih "Mathematical Analysis of Ozonation Process in Bubble Column" delivered as a research in the sixth Engineering Conference /College of Engineering, 5-7 April 2009

9- Mohammad F. Abid, Farah S. Jameel "Scale Effects on the Hydrodynamics of Bubble Column" Eng. & Tech. Journal. Vol. 27, No. 10, 2009
10- Adiba A. Mahmmod, Amer A. Abdul-Rehman, Mohammad F. Abid"
Hydrodynamic characteristics of a gas-liquid-solid fluidized bed containing a binary mixture of particles" Eng. & Tech. Journal. Vol. 27, No. 12, 2009

11- **Mohammad F. Abid**, Saadi K. Nasri, Qusay F. Al-Sallehy, Samera N. Abdulla, Kalid T. Rashid " Desalination of Iraqi Brackish Water by Nanofiltration Membrane" Desalination and Wastewater Treatment Journal, Vol. 29(2011)174-180.

12- Mohammad F. Abid, Atheel K. Jabir, Saad A. Faiq "Modeling of Dissolved

Oxygen Profile in Slurry Bioreactor" Nahrain University, College of Engineering Journal, 14(2), 177-188,2011.

13- Mohammad F. Abid, Orooba N. Abdulla, Kamal M. Ahmed "Experimental study of simultaneous heat and mass transfer in Falling film and bubble mode absorbers"
Petroleum Science and Technology Journal, Taylor and Francis Group, vol. 30, 467-477, 2012

14- **Mohammad F. Abid**, Ahmed Hadi, Shakir M. Ahmed "Hydrodynamic Characteristics Effect of Foam Control in a Three Phase Fluidized Bed Column" Journal of Petroleum Research and Studies, Petroleum Research and Development Center, No. 6, 158-185, December 2012.

15- Mohammad F. Abid, Mumtaz A. Zablouk, Abeer M. Abdel-Ameer "Experimental study of dye removal from industrial wastewater by membrane technologies of reverse osmosis and nanofiltration", Iranian Journal of Environmental Health Science & Engineering, vol. 9,1-17 (2012).

16- **Mohammad F. Abid**, Saadi K. Al-Nasri "Reuse of Iraqi Agricultural Drainage Water Using Nanofiltration", Journal of Membrane and Separation Technology, 2013, *2*, 53-62.

17- **Mohammad F. Abid**, Orooba N. Abdullah, Hiba M. Abdullah, Kamal M. Ahmed " Comparative Study of CWO of Phenols in Falling-Film andBack-Mix Reactors", Journal of Chemical Engineering of Japan, Vol. 46, No. 4, pp. 271-278, 2013.

18- Waleed K. Al-Saraf, Shakir M. Ahmed, **Mohammad F. Abid** "Modeling and Simulation of a Cracking Reactor", delivered as a research in Proceedings of the First Conference of Petroleum and Environment/ North Refinery Company (14-16 Jan. 2013)

19- **Mohammad F. Abid**, Farah T. Jasim, Luma S. Ahmed "Removal of Phenols from Refinery Wastewater using Trickle Bed Reactor", delivered as a research in the Second Conference of Modern Petroleum Technologies/ University of Technology (14-16 May 2013). Published in Eng. & Technol. Journal, University of Technology, Vol. 31, Part (A), No. 18, 2013.

20- **Mohammad F. Abid**, Mohamed I. Mohamed, Ahlam Saeed "Improvement of Antiknocking Characteristics of Iraqi Gasoline" Journal of Petroleum Research and Studies, Petroleum Research and Development Center, No. 7 July, pp. 10-26 (2013)

21- **Mohammad F. Abid**, Farah T. Jasim, Luma S. Ahmed "Hydrodynamics in a Trickle Bed Reactor" Eng. & Technol. Journal, University of Technology, Vol. 31, Part (A), No. 15, 2013.

22- **Mohammad F. Abid**, Farah T. Jasim, Luma S. Ahmed "KINETICS STUDY OF PHENOLS REMOVAL FROM WASTEWATER OVER A 0.5%PT/ Γ-AL2O3 CATALYST IN A TRICKLE BED REACTOR, Environmental Engineering and Management Journal, Technical University of Iasi, Romania, Vol.13, No. 5, 1265-1275 (2014). 23- **Mohammad F. Abid**, Amer A. Abdel-Rehman, Noor Hussein Hamza "Removal of Methyl Violet Dye from Synthetic Wastewater using a Hybrid Detoxification Process", Eng. & Technol. Journal, University of Technology, Vol. 32, Part (A), No. 6, 2014.

24- **Mohammad F. Abid**, Amer A. Abdel-Rehman, Noor Hussein Hamza "Optimum Conditions of Photocatalysis Process in a Wastewater Treatment" Eng. & Technol. Journal, University of Technology, Vol. 32, Part (A), No. 13, 2014

25- **Mohammad F. Abid**, Mohammed I. Mohammed, Orooba N. Abdullah, Luma Hussein, Abeer Sameer "Design and Operating a Pilot Plant for Purification of Industrial Wastewater from Toxic Organic Compounds by utilizing Solar Energy", The Korean Journal of Chemical Engineering, Vol. 31, No. 7, 1194-1203 (2014).

26- **Mohammad F. Abid**, Farah T. Jasim, Luma S. Ahmed"Hydrodynamics and Kinetics of Phenols Removal from Industrial Wastewater in a Trickle Bed Reactor(Part I: Hydrodynamic Study)"*Chem. Biochem. Eng. Q.*, 28 (3) 319–327 (2014)

27- **Mohammad F. Abid**, Orooba N. Abdullah, Hiba M. Abdullah "Experimental study of the effect of catalyst properties on hydrodynamics and mass transfer in a slurry reactor" delivered as a research in Proceedings of the seventh international chemical engineering (JICHE07) conference (4-6 November 2014), Amman- Jordan.

28- **Mohammad F. Abid**, Amer A. Abdel-Rehman, Noor H. Hamza "Hydrodynamic and kinetic study of a hybriddetoxification process with zero liquid discharge system in an industrial wastewater treatment" Journal of Environmental Health Science & Engineering (2014) 12:145.

29- **Mohammad F. Abid** "Desulfurization of gas oil using a solar photocatalytic microreactor", Iraqi Journal of Chemical and Petroleum Engineering, Vol.16 No.1 (March 2015) 49- 62.

30- **Mohammad F. Abid,** Ghanim M. Alwan, Lamyaa A. Abdul-Redha "Study on catalytic wet air oxidation process for phenol degradation in synthetic wastewater using trickle bed reactor "The Arabian Journal for Science and Engineering,(2016) 41:2659–2670

31- **Mohammad F. Abid,** Shakir M. Ahmed, Halah H. Hassan, Salah M. Ali" Hydrodynamic Study of an Ebullated-bed Reactor in the H-Oil Process" the Iranian Journal of Science and Technology (Sciences), Available Online from 16 March 2016.

#### 5-Books

**1-Engineering Drawing of Petrochemical Industries for 2<sup>nd</sup>-Year** Class\Vocational Education\Ministry of Education 14-Invited Lectures and Seminars\*

1-Scientific Symposium of Axens (IFP) on Advanced Technologies for Petroleum Industries, 22-29 April 2009, Beirut-Lebanon
2-The 1<sup>st</sup> Scientific Seminar on Renewable Energies, sponsored by IREX and University of Missouri, 17 Sep 2013, University of Technology

3- Scientific Symposium of Axens Company on H-Oil process, 10- - 7

21/4/2014, Lukoil Company, Bourgas, Bulgaria

15-Conferences and Training

1-The 6<sup>th</sup> Conference on Chemical and Petroleum Engineering, 5-7 April 2009, College of Engineering, University of Baghdad.

2- 1<sup>st</sup> Scientific Conference for Modern Technology for Petroleum Refining, 25-27April 2011, University of Technology-Baghdad

3-Sixth Jordan International Chemical Engineering Conference (JIChEC06), Amman-Jordan 12-14 March,2012

4-2<sup>nd</sup> Scientific Conference for Modern Technology for Petroleum Refining, 14-16 May,2013, University of Technology-Baghdad

5-1<sup>st</sup> Conference on Environment and Petroleum, 14-16 Dec., 2013,North Petroleum Company, Ministry of Oil

6-The 1st International Scientific Conference on Environment and Sustainble Development (ISCESD 2013)29-30 Dec, 2013

7-The 7th Jordan International Chemical Engineering Conference (JIChEC07), Amman-Jordan 4-6Nov.,2014

8-International Conference on Technologies and Materials for Renewable Energy, Environment andSustainability, TMREES15, April 17-20, 2015, Beirut-Lebanon

9-The 1<sup>st</sup> Conference of Postgraduate Researches on Impacts of Postgraduate Researches in Chemical Engineering on the Development of Chemical and Petroleum Industries Horizons, 18-19 May 2015, University of Technology