Curriculum Vitae

1-Personal Information

Name : Bashir Yousif Sherhan Al-Zaidi

: **Tel.:** 5313452 **Mobile:** + 964-7901516884 Affiliation (Included Phone and Email) **Viber:** + 964- 7724257271

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bashir.y.sherhan@uotechnology.edu.iq

: 6th February 1974 Date of Birth Place of Birth :: IRAQ-Baghdad

Nationality : Iraqi **Marital Status** : Married

2-Scientific Rank:

Asst. Prof. Dr. in Chemical Processing Engineering Branch – Staff member at the Chem.

Eng. Dept. since 2004 up to date (Full time) – University of Technology – Baghdad / Iraq

3-Research Interests

- Preparation and analysis of porous media (i.e. Zeolite, Bentonite, and Polymer materials).
- Characterization techniques of the porous materials (i.e. Catalyst and Membrane).
- Synthesis, post-synthesis (modification) and catalysis of the porous catalysts.
- Heterogeneous reactors in petroleum industry.
- Hydro-cracking of polymer waste in petrochemical processes.
- Gas adsorption-desorption and fluid separation.
- Preparation and analysis of greases synthesized from various thickeners.

4-Education

Date	Discipline	Degree	Institution	Thesis Title
2011	Chemical		University of	Thesis: The effect of modification techniques
	engineering	Ph.D.	Manchester –	on the performance of Zeolite-Y catalysts in
			United	hydrocarbon cracking reactions
			Kingdom	[Website]:-
				(https://www.escholar.manchester.ac.uk/api/dat
				astream?publicationPid=uk-ac-man-
				scw:133717&datastreamId=FULL-
				TEXT.PDF)
2003	Chemical	M.Sc.	University of	Dissertation: Preparation of water-resistance
	engineering		Technology –	greases from Iraqi Bentonite
			Baghdad-Iraq	
1996	Chemical	B.Sc.	University of	Project design: Recovery of Helium from
	engineering		Baghdad-Iraq	Natural gas

5-Postdoctoral Training (if available)

6-Management Posts (if available)

• Membership of the Chemical Processing Engineering Branch Council, the management of the Alumni Unit and the Presidency and membership of a number of the Committees such as the absence of the students, the educational supervision, auditing of books and the development of university curricula, updating the website of the Department (i.e. Internet and translation), the inventory of the equipment and the furniture and receiving and specifying the technical specifications for the laboratory devices

7-Grants and Fellowships

• Scholarship for the doctoral study at the University of Manchester in Britain at the expense of the Ministry of Higher Education and Scientific Research of Iraq for the period from 1-10-2007 to 1-10-2011.

8- Experience

A- Academic Experience

1- Undergraduate Level

- 2002-2003 taught 4th class in the Military College of engineering, subject: Industrial safety.
- 2003-2006 taught 3rd & 4th classes in the Al-Rasheed College of Engineering & Science, subjects: Petroleum refining technology, Numerical methods and Optimization techniques.
- 2006-2007 taught 4th class in the Al-Rasheed College of Engineering & Science, subject: Chemical Industries.
- 2003 up to date supervision and examination of project design for 4th class students.
- 2012-2013 taught 4th class in the University of Technology Chem. Eng. Dept., subject: Industrial engineering & management.
- 2012 up to date taught 4th class in the University of Technology Chem. Eng. Dept., subjects: Engineering of catalysts and heterogeneous reactors in petroleum refining
- 2013 up to date taught 1st class in the University of Technology Chem. Eng. Dept., subject: Technical English language (two courses I & II).

2- Postgraduate Level

- 2014-2015 taught the higher diploma course in the University of Technology Chem. Eng. Dept., subjects: Catalysts in Multiphase flow.
- 2017-2018 taught the higher diploma course in the University of Technology Chem. Eng. Dept., subjects: English language.
- 2018 up to date taught the M.Sc. course in the University of Technology Chem. Eng. Dept., subjects: Heterogeneous reactors.
- 2018 up to date taught the Ph.D. course in the University of Technology Chem. Eng. Dept., subjects: English language.
- 2014 up to date supervision and examination of H.D. Project, M.Sc. Dissertation and Ph.D. Thesis for the postgraduate students.

B-Non-academic Experience

- **1-** Member within the research group for the preparation of greases in Al-Basil general company for chemistry and petroleum research Ministry of Industry-Iraq, 1999 (Part time).
- **2-** Member within the research group for hydro-cracking of polymer waste in Ronco Engineering limited- North East England, 2008 2009 (Part time).

9-Employment History

- Military College of Engineering–Iraqi armed forces (1999 2003).
- Al-Rasheed College of Engineering & Science (2003 2004).
- University of Technology–Chemical Engineering Department (2004 up to date).

10-License/Certification

- Iraqi Engineers Union, since 06/08/1996 up to date Degree: Consultant.
- Association of University Lecturers, since 05/05/2005 up to date.
- Associate the Research Group of the Centre of Nanoporous Materials-UK, since 2009, [Website]:- http://www.cnm.manchester.ac.uk/bashir.htm.
- Federation of Arab Engineers, since 15/10/2012 up to date.
- Iraqi Academics Syndicate, since 19/11/2018 up to date.

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11-Honors and Distinctions (if available)

• Certificates of appreciation and gratitude documents from various scientific bodies.

12-Skills and Qualifications

- Statistic, optimization and numerical methods.
- Modeling and equipment design.
- Microsoft office (word, excel, power point, and outlook).
- Speed research and academic writing skills.
- English language skills (reading, writing, listening, and speaking) required for enrollment in postgraduate studies in UK universities.
- Advanced qualifications for using the characterization systems of the porous materials (i.e. IGA-001 system, MAS-NMR machine, XRD, ESEM, EDX, ICP-AES, BETisotherm, NH3-TPD, TGA, DSC, FTIR, HE-Pycnometer, and GC for chemical products or output investigation).
- Evaluation of patents and scientific publications in the specialty of chemical engineering exclusively.

13-Publications/ Books

1- Supervision

- Comparison the kinetics for cracking and hydro-cracking of n-heptane over USY-zeolite catalysts, H.D. Degree in Chemical Engineering, 2015.
- Preparation of zeolite Y catalyst from Iraqi rice husk for cracking of n-hexane, M.Sc. Degree in Chemical Engineering, 2016.
- Upgrading of heavy to light oil using catalytic low temperature aquathermolysis method M.Sc. Degree in Chemical Engineering

2-Research

Under publication

- Dealumination of Y-Zeolite by chemical treatment technique using EDTA-chelating agent: Characterization & Catalysis. Bashir Y. Al-Zaidi and Arthur A. Garforth.
- Improved the catalytic performance of Y-Zeolite catalyst by acid leaching dealumination and base leaching desilication. Bashir Y. Al-Zaidi and Arthur A. Garforth.
- Study the successive combination of leaching modifications for Na-NH₄Y- and Na-NH₄USY- Zeolite catalysts. Bashir Y. Al-Zaidi and Arthur A. Garforth.

Accepted Manuscripts

• Analysis the surface morphology of the porous media by using Atomic Force Microscope technique. Bashir Y. Sherhan Al-Zaidi, Al-Khwarizmi Engineering Journal, 13(4), 2017 accepted 10 July 2017.

Published

- Zn/HY-Zeolite as a Catalyst for Upgrading Iraqi Heavy Crude Oil Using Aquathermolysis Method. Amani Q Saeed, Adel S Hamadi, Bashir Y Sherhan. IOP Conference Series: Materials Science and Engineering Volume 579 (2019)
- A comparative study of Y-Zeolite catalysts derived from natural and commercial silica: synthesis, characterization, and catalytic performance. Najat J. Saleh, Bashir Y. Sherhan Al-Zaidi, and Zainab M. Sabbar. Arabian Journal for Science and Engineering, volume 43, pages 5819–5836 (2018).
- Effect of bore fluid flow rate on formation and properties of hollow fibers. Asrar A. Alobaidy, Bashir Y. Sherhan, Areej D. Barood, and Qusay F. Alsalhy. Journal of Applied Water Science, 7(8), PP. 4387-4398, 2017.
- Preparation of PPSU hollow fiber nanofiltration membranes for nanofiltration application. Bashir Y. Sherhan, Areej D. Abbas, Hussein A. Alabdly, Thamer J. Mohammed, Qusay F. Alsalhy, Thamera Kidher, Lamess H. Fahad, Hamsa Ahmed, and Remonda H. Melkon. Iraqi Journal of Chemical and Petroleum Engineering, 18 (2), 13-25, 2017.
- Produced water treatment using ultra-filtration and nano-filtration membranes. Bashir Y. Sherhan, Areej D. Abbas, Qusay F. Alsalhy, Thamera K. Abbas, Yusra M. Mahdi, Noura A. Abdul Kareem, Alaa A. Rashad, Zahraa W. Rashad, and Aiden A. Shawakat. Al-Khwarizmi Engineering Journal, 12 (3), 10-18, 2016.
- Designing cracking/hydrocracking Zeolite catalysts, Authors: Bashir Y. Al-Zaidi, Arthur A. Garforth, IChemE/Applied catalysis – Royal society of chemistry (RSC) / London-Catalyst preparation 4, 9, 2012.
- Study of the relationship between framework cation levels of Y-zeolites and behavior during calcination, steaming, and n-heptane cracking processes, Bashir Y Al-Zaidi, Richard J. Holmes, and Arthur A. Garforth, Industrial & Engineering Chemistry Research (I&EC), 51 (19), 6648-6657, 2012.
- The effect of modification techniques on the performance of zeolite-Y catalysts in hydrocarbon cracking reactions, by B. Y. Al-Zaidi and A. A. Garforth, 34th annual British zeolite conference University of Edinburgh– United Kingdom, Promoting the Science of Nanoporous Materials 51, 59, 2011.
- Synthesis, characterization, modification and catalysis of USY-Zeolite catalysts, by B.
 Y. Al-Zaidi and A. A. Garforth, 33rd annual British zeolite conference University of Southampton United Kingdom, Promoting the Science of Nanoporous Materials 27, 84, 2010.

 Preparation of water resistance greases from Iraqi Bentonite, by Bashir Y. Al-Zaidi, Emad F. Mansour, and Mohammed J. Abdul-Ghani, 4th Int. Engineering conference – Mansoura University – Egypt, IEC 10-32, 51, 2004.

3-Books

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14-Invited Lectures and Seminars

- Lecturer in the course of homogeneous and non-homogeneous catalysts used in petroleum processes, Center for Continuing Education University of Technology, 21-25 April 2013.
- Lecturer in the course of Problem Based Learning (PBL), Chem. Eng. Dept-University of Technology, 1-11-2016.

15-Conferences and Training

- Forum of Discussions to evaluate scholarship programs, Babylon Hotel Baghdad, 18-5-2017.
- Fifth Annual Student Conference for Graduation Projects, Summer Training and Communication with Graduates, University of Technology Chemical Engineering Department, 17-5-2017.
- Second Scientific Conference for postgraduate Studies, University of Technology Chemical Engineering Department, 10-11 May 2017.
- The Second Annual Conference of Chemical Engineers, Iraqi Engineers Union General Headquarters, 14-12-2016.
- Annual Scientific Student Conference 2015-2016, University of Technology Chemical Engineering Department, 26-4-2016.
- First Scientific Conference for postgraduate Studies in Chemical Engineering, University of Technology Chemical Engineering Department, 18-19 May 2015.
- Sixth Annual International Scientific Conference, General Secretariat of the Holy Shrine of Kadhimiya Baghdad, 23-4-2015.
- Problem Based Learning Workshop under the IREX US-Iraqi University linkage program, Erbil Iraq, 8-10 February 2015.
- The second engineering conference of control, computers and mechatronics, University of Technology Iraq, 25-27 February 2014.
- The fourth scientific conference of nanotechnology and advanced material, University of Technology Iraq, 6-7 November 2013
- The first conference of graduated students according to the scholarship program for the ministry of Higher Education and Scientific Research, University of Baghdad Iraq, 28 October 2013.
- The second scientific conference of advance techniques in petroleum refining technology, University of Technology Iraq, 14-16 May 2013
- The course of project management, Computer Engineering Dept. University of Technology-Iraq, 18-20 March 2013.
- Gas chromatography (GC) training at the thames Restek UK Limited, Saunderton United Kingdom, 15 March 2011.
- Proactive gas safety Ltd training, Manchester University United Kingdom, 9 December 2010.
- The course of improving the academic writing skills for PhD. student, Manchester University United Kingdom, 17 February 2010.

- Basic and advanced training for using the IGA-001 system, Hiden Isochema Ltd United Kingdom, 5-6 & 9-10 November 2009.
- 32nd Annual British zeolite association (BZA) meeting, University of Cumbria United Kingdom, 23-28 August 2009.
- Basic and advanced training for using the MAS-NMR machine, Manchester University United Kingdom, 13-17 April 2009.
- The course of Speed research degree, Manchester University United Kingdom, 28-30 April 2008.
- English language courses-gateway programme, English language centre Manchester University United Kingdom, 15 October 2007 to 01 February 2008.
- The course of computing and computer software, University of Technology Iraq, 31 Jun to 11 August 2005.
- The course of Teaching methods and university training and learning computer, Center for Continuing Education University of Technology-Iraq, 20-27 February 2005.
- 25th qualifying session to teach computer. Faculty of Science University of Mustansiriya Iraq, 01-30 Jun 2001.
- The course of Manufacturing oils and greases, Al-Basil general company for chemistry and petroleum research Ministry of Industry-Iraq, 01 September 1999 to 30 November 1999.