Curriculum Vitae



1-Personal Information

Name : Talib M. Albayati.

Affliction : University of Technology, Chem. Eng. Dep,

Alsinaa Street No.52, P.O. Box 35010, Baghdad-

Iraq.

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Date of Birth : 3rd of May 1971.

Place of Birth : Diyala/Iraq.

Nationality : Iraqi. Marital Status : Married.

2-Scientific Rank: Professor / Ph.D.

3-Research Interests

- Electrochemical coating process.
- Membrane separations; water and wastewater treatment.
- Nanoporous Application as a catalyst in Petroleum refinery process:
- (Isomerization).
- Desulfurization.
- Biodiesel production.
- Nanoporous Application as adsorbents for purification of water and waste water treatments.
- Nanoporous Application as adsorbents for Drug Delivery System.

4-Education

(List your academic background, including undergraduate and graduate institutions attended)

Date	Discipline	Degree	Institution	Thesis Title
1995	Chemical Engineering	B.Sc.	University of Technology	Design Factory for Hydrogen Peroxide Production
2001	Chemical Engineering	M.Sc.	University of Technology	Anodizing of Aluminum- Magnesium Alloy 5052.
2009	Chemical Engineering	PH.D	University of Technology	Enhancement of Reverse Osmosis Membranes Performance with Air Sparging Technique.

5-Postdoctoral Training

• **Post-Doctoral** in Nanotechnology-Manchester Metropolitan University (MMU), **United Kingdom** (UK), 1/9/2011 to 1/9/2012. Supervisor Dr. Aidan M. Doyle.

6-Management Posts

- Director of Laboratories in Chemical Engineering Department, University of Technology, from **Sep. 2012** up to 6/9/2017.
- Branch Boss of Chemical Engineering and Refinery Oil in Chemical Engineering Department, University of Technology, from 16/18/2017 up to date.

7-Grants and Fellowships

- Postdoctoral Scholarship, Faculty Science and Engineering, School of science and the Environment. John Dalton building, Chester Street/Manchester M1 5GD/United Kingdom. Telephone +44(0) 161-247/ 1435/1439/1455. Fax +44(0) 161-247 6840. E-mail se-esuite@mmu.ac.uk. 1/9/2011 to 1/9/2012.
- Fellowship (Research Scholarships), Department of Applied Physics, Complutense University/ Madrid / Spain, from 26th of October 2007 to 28th of April 2008.
- Researcher Visitor, Institute on Membrane Technology, ITM-CNR, Calabria University, Cosanza, Italy, July-August 2009.
- Researcher Visitor, Manchester Metropolitan University (MMU), United Kingdom (UK), 1/9/2011 to 1/9/2012. Supervisor Senior Lecturer Aidan M. Doyle.

8-Academic Experience

1-Undergraduate Level

- Nanoporous Materials.
- Petroleum Refinery Process.
- Unit Operation
- Catalyst.

2-Postgraduate Level

- 1. Master Degree Supervisor for Chemical Engineering Students (Raghad Adnan Habash) from 18/11/2012, Dissertation: "The Nano porous SBA-15 as Adsorbent for Removal of Methylene Blue from Wastewater".
- 2. Master Degree Supervisor for Chemical Engineering Students (Dalya Basil Abid) from 30/1/2014, Dissertation: "Removal of Pollutants from Aqueous solution by Functionalized Mesoporous Material".
- 3. Doctorate Degree Supervisor for Chemical Engineering Students (Ziad Tariq Ahmad) from 15/2/2014, Thesis 'KINETIC STUDY AND MODELING OF BIODIESEL PRODUCTION OVER PREPARED NANO CATALYST IN BATCH AND FIXED BED REACTORS".
- 4. Master Degree Supervisor for Chemical Engineering Students (Haneen F. Alazzawi) from 5/5/2015, Dissertation: "Synthesis and Characterization of Mesoporous Materials for Drug Delivery".
- 5. Master Degree Supervisor for Chemical Engineering Students (Khairi Risin Kalash) from 27/12/2015, Dissertation: "Treatment of Wastewater from Oil Refinery Units by Adsorption Using Chemical and Biological Materials".
- 6. Master Degree Supervisor for Chemical Engineering Students (Abd-Alkadir Alshammary) from 7/12/2016, Dissertation: "Application of Ordered Nanoporous Material as the Carrier and Releasing Agent for Drug Delivery Systems".
- 7. Master Degree Supervisor for Chemical Engineering Students (Ali Mohammed Hamza) from 24/12/2017, Dissertation: "Evaluation the Surface Modification of Magnetic Nanoporous Adsorbents in Drug Delivery System."
- 8. Doctorate Degree Supervisor for Chemical Engineering Students (Saja Mohsin Jabar) from 1/9/2018, Thesis "Application of Nanoporous Material in a Membrane Adsorption Reactor (MAR) as an Integral System for Removal of Pollutant from Wastewater".
- 9. Master Degree Supervisor for Chemical Engineering Students (Yusra Ali Abdalkodor) from 6/12/2018, Dissertation: "A Novel Technique for Sulfur Removal from the Petroleum Heavy Oil"

9-Employment History

- 1. **B.Sc.** in Chemical Engineering-University of Technology-Baghdad, Iraq, 1/9/1990 to 27/6/1995.
- 2. **Diploma in Military Science** University of AL baker/ The 2nd Military College, Deeyala, Iraq, 17/7/1995 to 17/7/1996.
- 3. M.Sc. in Chemical Engineering- University of Technology-Baghdad, Iraq, 1/10/1998 to 21/1/2001. Thesis: "Anodizing of Aluminum-Magnesium Alloy 5052". Supervisor Dr.Nahid W. Kaseer, and Ali Hussin.
- **4. Ph.D.** in Chemical Engineering- University of Technology-Baghdad, Iraq, 1/10/2005 to 11/8/2009. Thesis: "Enhancement of Reverse Osmosis Membranes Performance with Air Sparging Technique". Supervisor Dr. Qusay alsalhy, Mumtaz A. Zablouk.
- Post-Doctoral in Nanotechnology-Manchester Metropolitan University (MMU), United Kingdom (UK), 1/9/2011 to 1/9/2012. Supervisor Senior Lecturer Aidan M. Doyle.

10-License/Certification

- 1. Chemical Engineer Officer-Ministry of Defense, from 17/7/1996 to 1/9/1998.
- 2. Assistant lecturer, Department of Chemical Engineering-University of Technology, Alsinaa Street No. 52, P.O. Box 35010, Baghdad-Iraq, from **21/1/2001 to 11/8/2009**.
- 3. Lecturer Doctor, Department of Chemical Engineering-University of Technology, from **11/8/2009** up to date.
- 4. Member of Chemical Engineering Research unit, University of Technology, from **Sep. 2009** up to date
- 5. Member of Iraqi Engineer Association, from 27/6/1995 up to date.
- 6. Consultant in the ministry of military industry from 2000 to 2003.
- 7. Memberships of the Board Directors for the public Al-Faris Company / Ministry of Industry and Minerals (2013-2015).
- 8. Editorial board of **Canadian** Center of Science and Education (**Canada**) Journal of Materials Science Research (CJMSR), from **2011** up to date.
- 9. **Top Reviewer Award 2015,** Recognition for acting as a reviewer for 10 or more papers for *Renewable Energy* in 2015. The Editors of *RENEWABLE ENERGY*. **Elsevier**, Amsterdam, Netherlands.

- 10. Membership of Technical Committee & Editorial Review Board on Chemical and Molecular Engineering for World Academy of Science, Engineering and Technology from 2015 up to date.
- 11. **Certificate of Reviewing,** awarded August, 2015, The Editors of *JOURNAL OF CONTAMINANT HYDROLOGY*. Elsevier, Amsterdam, Netherlands.
- 12. **Certificate of Reviewing,** awarded May, 2015, The Editors of **RENEWABLE ENERGY**. Elsevier, Amsterdam, Netherlands.
- 13. Certificate of Reviewing, awarded August, 2016, The Editors of *JOURNAL OF HAZARDOUS MATERIALS*. Elsevier, Amsterdam, Netherlands.
- 14. Editorial board of Journal of Chemical Research and Application (JCRA) from **29/12/2018** up to date.

11-Skills and Qualifications

- 1. **B.Sc**. in Chemical Engineering-University of Technology-Baghdad, Iraq, 1/9/1990 to 27/6/1995.
- 2. **Diploma in Military Science** University of AL baker/ The 2nd Military College, Deeyala, Iraq, 17/7/1995 to 17/7/1996.
- **3. M.Sc.** in Chemical Engineering- University of Technology-Baghdad, Iraq, **1/10/1998 to 21/1/2001.Thesis:** "Anodizing of Aluminum-Magnesium Alloy 5052". Supervisor Dr.Nahid W. Kaseer, and Ali Hussin.
- **4. Ph.D.** in Chemical Engineering- University of Technology-Baghdad, Iraq, **1/10/2005 to 11/8/2009**. **Thesis:** "Enhancement of Reverse Osmosis Membranes Performance with Air Sparging Technique". Supervisor Dr. Qusay alsalhy, Mumtaz A. Zablouk.
- Post-Doctoral in Nanotechnology-Manchester Metropolitan University (MMU), United Kingdom (UK), 1/9/2011 to 1/9/2012. Supervisor Senior Lecturer Aidan M. Doyle.

12-Publications

- Research published in international journals
- 1. Qusay F. Alsalhy, **Talib M. Albyati** & Mumtaz A. Zablouk, A study of The Effect of Operating Conditions on Reverse Osmosis Membrane Performance with and Without Air Sparging Technique. Chemical Engineering Communications, 200 (1), (2013) 1-19.
- Talib M. Albayati, Aidan M. Doyle. Shape-Selective Adsorption of Substituted Aniline Pollutants from Wastewater, Adsorption Science & Technology, Volume 31 Number 5 (2013).459-468.
- **3. Talib M. Albayati,** Aidan M. Doyle. Purification of Aniline and Nitrossubistituted aniline Contaminants from Aqueous Solution Using Beta Zeolite, Chemistry: Bulgarian Journal of Science Education, Volume 23, Number 1 (2014)105-114.
- 4. Talib M. Albayati and Aidan M. Doyle. "SBA-15 Supported Bimetallic Catalysts for Enhancement Isomers Production During n-Heptane Decomposition" International Journal of Chemical Reactor Engineering, 12(1) (2014)345–354. DOI: 10.1515/ijcre-2013-0120
- **5. Talib M. Albayati,** Sophie E. Wilkinson, Arthur A. Garforth & Aidan M. Doyle. Heterogeneous Alkane Reactions over Nanoporous Catalysts. Transport in Porous Media, Volume 104, No. 2 (2014); Pages; 315-333. DOI 10.1007/s11242-014-0336-1.
- **6. Talib M. Al-Bayati**, Removal of Aniline and Nitro-Substituted Aniline from Wastewater by Particulate Nanoporous MCM-48, Particulate Science and Technology: An International Journal, 32:6, (2014) 616-623. DOI:10.1080/02726351.2014.948973.
- **7. Talib M. Albayati** and Aidan M. Doyle, Encapsulated heterogeneous base catalysts onto SBA-15 nanoporous material as highly active catalysts in the transesterification of sunflower oil to biodiesel, Journal of Nanoparticle Research, Volume 17, issue 2 (2015); Pages;109, DOI:10.1007/s11051-015-2924-6.

- **8.** Anaam Akram Sabri, **Talib Mohammed Albayati**, Raghad Adnan Alazawi, Synthesis of ordered mesoporous SBA-15 and its adsorption of methylene blue, Korean Journal of Chemical Engineering, 32(9), 1835-1841 (2015), DOI: 10.1007/s11814-014-0390-y.
- **9. Talib M. Albayati**, Anaam A. Sabri & Raghad A. Alazawi, Separation of MethyleneBlue as Pollutant of Water by SBA-15 in a Fixed-Bed Column, Arabian Journal for Science and Engineering, 41(7), (2016) 2409-2415, DOI 10.1007/s13369-015-1867-7.
- **10.** Aidan M. Doyle, **Talib M. Albayati**, Ammar S. Abbas, Ziad T. Alismaeel, Biodiesel production by esterification of oleic acid over zeolite Y prepared from kaolin, Renewable Energy 97 (2016) 19-23. http://dx.doi.org/10.1016/j.renene.2016.05.067.
- **11. Talib Mohammed Albayati,** Ghanim Magbol Alwan, and Omar Sabah Mahdy, High performance methyl orange capture on magnetic nanoporous MCM-41 prepared by incipient wetness impregnation method, Korean Journal of Chemical Engineering, 34(1), 259-265 (2017) DOI: 10.1007/s11814-016-0231-2.
- **12.** Aidan M. Doyle, Ziad T. Alismaeel, **Talib M. Albayati**, Ammar S. Abbas, High purity FAU-type zeolite catalysts from shale rock for biodiesel production, Fuel 199 (2017) 394–402. http://dx.doi.org/10.1016/j.fuel.2017.02.098.
- **13.** Ziad T. Alismaeel, Ammar S. Abbas, **Talib M. Albayati**, Aidan M. Doyle, Biodiesel from batch and continuous oleic acid esterification using zeolite catalysts, Fuel 234 (2018) 170–176. https://doi.org/10.1016/j.fuel.2018.07.025.
- **14. Talib M. Albayati**, Application of nanoporous material MCM-41 in a membrane adsorption reactor (MAR) as a hybrid process for removal of methyl orange, Desalination and Water Treatment 151 (2019) 138–144. https://doi: 10.5004/dwt.2019.23878.
- **15. Talib M. Albayati**, Anaam A. Sabri, Dalia B. Abed, Adsorption of binary and multi heavy metals ions from aqueous solution by amine functionalized SBA-15 mesoporous adsorbent in a batch system, Desalination and Water Treatment 151 (2019) 315–321. http://doi: 10.5004/dwt.2019.23937.

- **16. Talib M. Albayati** and Abd Alkadir A. Jassam, Synthesis and characterization of mesoporous materials as a carrier and release of prednisolone in drug delivery system, Journal of Drug Delivery science and Technology, 53 (2019) 101176. https://doi.org/10.1016/j.jddst.2019.101176.
- **17. Talib M. Albayati**, Issam K. Salih, Haneen F. Alazzawi, Synthesis and characterization of a modified surface of SBA-15 mesoporous silica for a chloramphenicol drug delivery system. Heliyon 5 (2019) e02539. https://doi.org/10.1016/j.heliyon.2019.e02539.
- **18. Talib M. Albayati** and Khairi R. Kalash, Polycyclic aromatic hydrocarbons adsorption from wastewater using different types of prepared mesoporous materials MCM-41in batch and fixed bed column. Process Safety and Environmental Protection 133 (2020) 124–136. https://doi.org/10.1016/j.psep.2019.11.007.
- **19. Talib M. Albayati**, Anaam A. Sabri, Dalia B. Abed, Functionalized SBA-15 by amine group for removal of Ni(II) heavy metal ion in the batch adsorption system, Desalination and Water Treatment 174 (2020) 301–310. http://doi: 10.5004/dwt.2020.24845.
- 20. Ali M. Alkafajy, Talib M. Albayati, High performance of magnetic mesoporous modification for loading and release of meloxicam in drug delivery implementation. Materials Today Communications 23 (2020) 100890. https://doi.org/10.1016/j.mtcomm.2019.100890.
- **21.** Saja M. Alardhi, **Talib M. Albayati**, Jamal M. Alrubaye, Adsorption of the methyl green dye pollutant from aqueous solution using mesoporous materials MCM-41 in a fixed-bed column, Heliyon 6 (2020) e03253. https://doi.org/10.1016/j.heliyon.2020.e03253.
- **22.** Yusra A. Abd Al-Khodor, **Talib M. Albayati**, Employing sodium hydroxide in desulfurization of the actual heavy crude oil: Theoretical optimization and experimental evaluation, Process Safety and Environmental Protection 136 (2020) 334–342. https://doi.org/10.1016/j.psep.2020.01.036.
- **23.** Saja M. Alardhi, Jamal M. Alrubaye, **Talib M. Albayati**, Adsorption of Methyl Green Dye onto MCM-41: Equilibrium, Kinetics and Thermodynamic Studies, Desalination and Water Treatment 179 (2020) 323–331.

- Research published in national journals
- **1.** Nahidh W. Kaseer, Ali Hussin A., **Talib M. Naieff**, Anodizing of Aluminum-Magnesium Alloy 5052, Iraqi Journal of Chemical and Petroleum Engineering, vol. 3 (2002) 35-44.
- 2. Nahidh W. Kaseer, Ali Hussin A., Talib M. Naieff, The determination of the variables of high response on the anodizing of Aluminum-Magnesium alloy 5052 (statistical analysis), Iraqi Journal of Chemical and Petroleum Engineering, vol. 3 (2002) 25-30.
- **3. Talib M. Naieff,** Sami A. Ajeel, Nissreen Sabah, Using alternative current (A.C) for anodizing process, Eng. and Tech. Journal, 2005, vol. 24, no.3 (307-327).
- **4.** Sami A. Ajeel, Jamal I. Hussein, **Talib M. Naieff**, Improvement of corrosion resistance for carbon steel alloy (ST-52) used in Marine Environments, Eng. and Tech. Journal, 2005, vol. 24, no.3 (328-347)...
- **5. Talib M. Al-bayati**, Coloring the thickness of Anodized Aluminum by Integral Color Process, Eng. & Tech. Journal. Vol.31. Part (A) Engineering, No.3, 2013.
- 6. Talib M. Al-bayati, Preparation and Characterization of Nanoporous Zeolitic Membranes for Catalytic Applications, Engineering and Technology Journal, Vol.31, Part (A) Engineering, No.17, 2013.
- **7. Talib M. Albayati**, Aidan M. Doyle. Hydroisomerization and Hydrocracking of n-Heptane over Nanoporous Trimetallic (Pt-Ni-Co/SBA-15 Catalyst), Engineering and Technology Journal, Vol.31, Part (A) Engineering, No.18, 2013.
- **8. Talib M. Albayati**, Aidan M. Doyle. Synthesis of Biodiesel by Nanoporous Catalyst Supported Alkali Metals and It's Hydroxide, Engineering and Technology Journal, Vol.32, Part (B) Science, No.4, 2014.

- 9. Ammar S. Abbas, Talib M. Albayati, Ziad T. Alismaeel & Aidan M. Doyle. Kinetics and Mass Transfer Study of Oleic Acid Esterification over Prepared Nanoporous HY zeolite, Iraqi Journal of Chemical and Petroleum Engineering, Vol.17 No.1 (March 2016) 47-60.
- **10.** Anaam A. Sabri, **Talib M. Albayati** and Dalia B. Abed. Removal of Cobalt (Co (II)) from Aqueous Solution by Amino Functionalized SBA-15. Engineering and Technology Journal, Vol. 36, Part A, No. 7, 2018. Pp.703-708.
- **11. Talib M. Albayati** and Khairi R. Kalash, "Biosorption Technique for Naphthalene Removal from Aqueous Solution by Chara sp., Algae". Engineering and Technology Journal, Vol. 36, Part A, No. 9, 2018.
- **12. Talib M. Albayati** and Abd Alkadir A. Jassam "Experimental Study of Drug Delivery system for Prednisolone Loaded and Released by Mesoporous Silica MCM-41" Al-Khwarizmi Engineering Journal, Vol. 15, No. 1, March, (2019) P.P. 117- 124.
- **13. Talib M. Albayati** and Ali M. AlKafajy "Mesoporous Silica MCM-41 as a Carriers Material for Nystatine Drug in Delivery System" Al-Khwarizmi Engineering Journal, Vol. 15, No. 2, June, (2019) P.P. 34-43.
- **14.** S. M. Alardhi, J. M. Alrubaye and **T. M. Albayati**, Hollow fiber ultrafiltration membrane for methyl green dye removal, Engineering and Technology Journal, Vol. 38, Part A, No. 07, pp. 1077-1083, 2020.

13-Conferences

International Conference

1. **Talib M. Naieff,** Qusay alsalhy, Mumtaz A. Zablouk, Enhancement of Reverse Osmosis Membranes Performance with Air Sparging Technique, Engineering Conferences International (ECI) Italy - Cetraro (Calabria), May 8-12, 2010.

- 2. **Talib.M. Albayati**, S. E. Wilkinson, A. A. Garforth, A. M. Doyle, Alkane Reactions over Nanoporous Catalysts, British Zeolite Association (BZA) XXXV Annual Meeting, University of Chester –United Kingdom, 15th-19th July 2012.
- 3. **Talib M. Albayati,** Anaam A. Sabri and Raghad A. Alazawi, Synthesis of SBA-15 Mesoporous Silica Material and It's Application in Methele blue Removal, International Conference on Ionic Liquid 2013 (ICIL 13), 11-13 December in Langkawi Island, Kedah, Malaysia.
- 4. **Talib M. Albayati**, MCM-48 Supported Pt-Ni, Pt-Co and Ni-Co Bimetallic Catalysts for Isomerization Production during n-Heptane Reactions, 1st International Conference on the Science and Engineering of Materials 13th -14th November 2013 (ICOSEM 2013) in Sunway Putra Hotel, Kuala Lumpur, Malaysia.
- 5. Ziad T. Ahmed, Ammar S. Abbas, **Talib M. Albayati** and Aidan M. Doyle, Biodiesel Production Using Zeolites Prepared from Shale rock and domestically Soured Ash, British Zeolite Association (BZA) Spring Meeting, University of Glasgow –United Kingdom, 9th-11th April 2014.
- 6. Ziad T. Ahmed, Ammar S. Abbas, **Talib M. Albayati**, Aidan. M. Doyle Faujasite zeolite prepared from shale rock as a catalyst for biodiesel production. International Conference on Applied Mineralogy & Advanced Materials, Castellaneta Marina (Taranto), Italy June, 7-12, 2015.
- 7. R. J. Khadim, **T. Albyati**, Z. Shneen, Qusay Alsalhy, A. Figoli S. Simone, E. Drioli, Preparation and characterization of PVC PS PVA hollow fiber nanofiltration composite membranes, The 2nd international conference on Building, Construction, and environmental Engineering, BCEE2-2015, 17-19 October, American University of Beirut, Lebanon.
- 8. H. Alazawi and **T. Albayati**, Synthesis and Characterization of Nanoporous Materials for Drug Delivery System, International Conference / Workshop 0f Inter Islamic Network on Nanotechnology (INN) Nanotechnology and Nanomedicine 2-3 May 2017 Material and Energy Research Center (MERC) Alborz, I. R. IRAN.

• National Conference

1. Talib M. Naieff, Khalid H. Rashid, Comparative Study for Anodizing Aluminum Alloy 1060 by Different Types of Electrolytes Solutions, first scientific conference on

- modern technologies in oil and gas refinery Chemical Eng.Dept., University of technology and midland refineries company, 25-27/4/2011.
- **2. Talib M. Albayati**, Aidan M. Doyle, Hydroisomerization and Hydrocracking of n-Heptane over Nanoporous Trimetallic (Pt-Ni-Co/SBA-15 Catalyst). Second scientific conference on modern technologies in oil and gas refinery Chemical Eng.Dept., University of technology and midland refineries company, 14-16/5/2013.
- **3.** Talib M. Albayati, Aidan M. Doyle, Synthesis of Biodiesel by Nanoporous Catalysts Supported Alkali Metals and its Hydroxides, of the 4th International Scientific Conference for Nanotechnology & Advanced Materials and Their Applications (ICNAMA 2013), University of Technology/ Nanotechnology & Advance Materials Research Center, 3-4 NOV. 2013.