

Sulaiman Al-Zuhair

PhD, Biochemical Engineering

Contact Information

Chemical and Petroleum Engineering Department
UAE University, 15551 Al-Ain, UAE
Tel: +971-3-7135319
Cell: +971-50-7600313
Email: s.alzuhair@uaeu.ac.ae

Work Experience

Chemical Engineering Department

UAE University, AlAin, UAE

09.2015 – present Professor - *Coordinator of the M.Sc. Program*

09.2009 – 09.2015 Associate Professor

08.2006 – 09.2009 Assistant Professor

Chemical Engineering Department

The University of Nottingham, Malaysia Campus

09.2004 – 08.2006 Assistant Professor – *Admission tutor*

Chemical Engineering Department

Taylor University, Malaysia

07.2003 – 09.2004 Lecturer

Qualifications

PhD, Biochemical Engineering, University of Malaya, Malaysia

09.1999-07.2003

Thesis title: Kinetics of Enzymatic Hydrolysis of Palm Oil Using Lipase

M.Sc., Chemical and Environmental Engineering, University Putra Malaysia

12.1996-07-1998

Thesis title: Design of Palm Oil Clarifier Using Liquid-Liquid Settling Model

B.Sc., Chemical Engineering, Jordan University of Science and Technology

09.1991-01-1996

Graduated with excellent grade of 87.6% ranked first amongst 74 graduates

Editorial Boards Memberships

Global Journal of Engineering & Technology Review
Editorial Board

Science International Journal
Editorial Board

Keys of Science
Editorial Board

Journal of Engineering Science and Technology
Editorial Board

Enzymatic Biodiesel Production, Journal of Enzymes Research
Leading Editor

Frontiers in Energy and Research Journal: Bioenergy and Biofuels
Review Editor

Renewable Energy (Elsevier)
Guest Editor

Reviewing

Undergraduate Programs in the Biology Department, UAE University
Internal Reviewer, 2010

University of California Energy Institute, USA
Reviewer of a research proposal, 2007

Scientific Research Support Fund, Jordan
Reviewer of a research proposal, 2010

Center for Research and Development, Taylor's University, Malaysia
Reviewer of a research proposal, 2010

Portuguese Foundation for Science and Technology (FCT), Portugal
Reviewer of a research proposal, 2012

University of Malaya Research Center, Malaysia
Reviewer of a research proposal, 2013

Chair, Department of Chemical Engineering Research Committee, UAE University
Review all research proposals submitted by faculty members in the Chem Eng Dept

Internationally Reputed Journals
On average, every year I review four to five papers submitted to internationally reputed journals

Achievements and Awards

College of Engineering Award for Excellence in Research, UAE University, 2016

External fund of 3.75 Million US\$

03.2010: Funding agency: Japan Cooperation Center, Petroleum

Engineering Students Renewable Energy Competition Award

05.2010: Supervised student project winning fourth place 2010, UAE

Best Externally Funded Research Award, UAE University, 2008

Marquis Who's Who in Science & Engineering

2006-2007 - 9th Edition

Top Rank Graduated Student Award, Jordan Univ. of Science & Technology, 1996

University Honor list, Jordan University of Science and Technology

For the years 1992, 1993, 1994 and 1995

Research Grants

A. On-going Projects

Principle Investigator - Energy & Environment Center - 800,000AED (US\$218,000)

2016-2020: Growth of microalgae for simultaneous biodiesel production and treatment of industrial wastewater

Co-Investigator - UPAR Fund - 800,000AED (US\$218,000)

2016-2019: Laboratory investigation of the UAE-Biodiesel fuel: production, engine performance and Toxicity of emissions on human health and environment

Co-Investigator - Energy and Environment Center - 500,000AED (US\$136,000)

2015-2018: Natural gas utilization: Partial oxidation of methane to methanol and other value-added products using novel nanostructured catalysts

Co-Investigator - Interdisciplinary Grant - 120,000AED (US\$33,000)

2014-2016: Vortex tube energy separation performance under different tube parameters

Principle Investigator - Zayed Center of Health Sciences - 500,000AED (US\$136,000)

2014-2017: The development of therapeutic anticancer agents extracted from microalgae and their application in photodynamic and sonodynamic therapies

Co-Investigator - UPAR Fund - 386,000AED (US\$105,000)

2014-2017: Effective/rapid characterization of microalgae lipid content using radio frequency technique

Co-Investigator - Start-up Grant - 500,000AED (US\$136,000)

2014-2017: Fibre in fibre bioartificial liver device (Emirates EmLAD) evaluation using adult stem cells

Co-Investigator - National Research Foundation - 160,000AED (US\$43,500)

2014-2016: Emirates Liver Assist Device (EmLAD) for Liver Failure Treatment using Activated Carbon (Charcoal) Produced from Local plants and Date Pits

B. Completed Projects

Principle Investigator - SURE Fund - 35,0000AED (US\$9,000)

2015-2015: Phenols removal by microalgae

Co-Investigator - National Research Foundation Fund - 240,000 AED (US\$65,550)

2013-2015: Metal/metal oxide-doped carbon nanofiber desulfurization sorbents in fuel cell applications

Principle investigator - National Research Foundation - 480,000AED (US\$203,000)

2011-2014: Using date palm cellulosic waste in the enzymatic production of biofuels

Co-Investigator - JCCP/JX External Fund - 1,600,000 AED (US\$435,000)

2011-2014: Operation of Fuel Cell using propane of high sulfur content as feedstock

Co-investigator - National Research Foundation Fund - 680,000AED (US\$186,000)

2011-2014: Biodegradation of mixtures of BTEX compounds in spouted bed bioreactor

Co-Investigator - JCCP/NORI External Fund - 13,800,000 AED (US 3,750,000)

2010-2015: Design and construction of a pilot plant for advanced refinery wastewater treatment

Principal investigator - Interdisciplinary Research Fund - 200,000AED (US\$54,500)

2009-2012: Enzymatic biodiesel production from lamb meat fats extracted by supercritical CO₂

Principal Investigator – Internal Individual Fund - 26,400 AED (US\$ 7,250)

2009-2010: Key enzymes inhibition by dates extract for non-insulin dependent diabetes mellitus

Co-Investigator - JCCP/NORI External Fund - 2,970,000 AED (US\$ 600,000)

2007-2010: Development, design and evaluation of advanced refinery wastewater treatment processes

Principal investigator - Internal Individual Fund - 30,000 AED (US\$ 8,300)

2007-2008: Enzymatic production of biodiesel from waste cooking oil using lipase

Co-Investigator - IPPP Grant - 16,000 RM (US\$ 5,300)

2000-2002: Kinetics of the hydrolysis of palm oil by lipase

PhD and M.Sc. Theses Supervision

A. PhD

- **Two PhD Theses Supervision:** One graduated and one still on-going

B. M.Sc.

- **Nine M.Sc. Theses Supervision:** Seven graduated and two still on-going
- **Four M.Sc. technical Projects Supervision**

C. Theses Examination

- **Served as an examiner of one PhD thesis and four M.Sc. theses**

Invited Speaker

Keynote Speaker: New York U. Conference on Genomics and Systems Biology II, Abu Dhabi (2014)

Keynote Speaker: Australian Unlimited MENA, Dubai (2014)

Seminar Presenter: Herriot Watt University, Dubai Campus (2013)

Patents

US patent No. US 9,399,740

Enzymatic Biodiesel Production from Lamb Meat Fat in Supercritical Condition

Canadian patent No. CA 2,796,105

Process and System for the Treatment of Industrial and Petroleum Refinery Wastewater

Publications

h-index 22 ; i10-index 30 ; over 1790 citations (Source: Google Scholar; Aug. 2016)

A. Books

S. Al-Zuhair and H. Taher (2015) Supercritical Fluids Technology in Lipase Catalysed Processes. CRC Press, Taylor & Francis Group, USA (ISBN 9781498743877)

B. Book Chapters

1. H. Taher, S. Al-Zuhair, A. Al-Marzouqi, Y. Haik and M. Farid (2014) Effectiveness of Enzymatic Biodiesel Production from Microalga Oil in Supercritical Carbon Dioxide. In: ICREGA2014, Springer
2. S. Al-Zuhair (2010) Biochemical Catalytic Production of Biodeisel. In: Handbook of Biofuels Production: Processes and Technologies. R Luque, J Campelo, J H Clark (Eds.) Woodhead publishing Limited, Cambridge, UK

C. Journal Papers (58 papers)

1. S. Al-Zuhair, S. Ashraf, S. Hisaindee, N. AlDarmaki, S. Battah, D. Svistunenko, B. Reeder, G. Stanway, A. Chaudhary (2016) Enzymatic Pre-treatment of Microalgae Cells for Enhanced Extraction of Proteins. Engineering in Life Sciences (Wiley-VCH), In-Press
2. S. Al-Zuhair, M. Nabil, Y. Abdi, M. Al Sayyed, H. Taher (2016) High Concentration Phenol Removal Using Freshwater Microalgae. International Journal of Biotechnology for Wellness Industries (Lifescience Global), 5: 000-000
3. S. Al-Zuhair, M. Abujayyab, A. Khaleel (2016) Adsorption Kinetics of Ethyl Mercaptan Found in Commercially Available LPG in UAE. Energy & Environmental Engineering (Horizon Research), 4: 7-14
4. S. Al-Zuhair, S. AlKetbi, M. Al-Marzouqi (2016) Regenerating diethanolamine aqueous Solution for CO₂ absorption using microalgae. Industrial Biotechnology (Mary Ann Liebert) 12: 105-108
5. S. Al-Zuhair, E. Geirge, M. Nour (2015) Using Marine Microalgae Strains for Oil Removal from Oil-Water Emulsion Remediation. Journal of Biochemical Technology 6: 987-989

6. H. Taher, S. Al-Zuhair, A. AlMarzoqui, Y. Haik and M. Farid (2015) Properties of Biodiesel Produced by Enzymatic Transesterification of Lipids Extracted from Microalgae in Supercritical Carbon Dioxide Medium. *International Journal of Biological, Biomolecular, Agricultural, Food and Biotechnological Engineering*, 9: 694-697
7. S. Al-Zuhair, A. Khalil, M. Hassan, A. Abdulrazak, K. Basil, A. Fardoun (2015) Performance Evaluation of LPG Desulfurization by Adsorption for Hydrogen Production. *Journal of Energy Chemistry (Elsevier)* 24: 477-484
8. S. Al-Zuhair, M. Abualreesh, K. Ahmed, A. Abdulrazak (2015) Enzymatic Delignification of Biomass for Enhanced Fermentable Sugars Production. *Energy Technology (J-Wiley)* 3: 121-127
9. H. Taher, S. Al-Zuhair, A. AlMarzoqui, Y. Haik and M. Farid (2015) Growth of Microalgae using CO₂ Enriched Air for Biodiesel Production in Supercritical CO₂. *Renewable Energy (Elsevier)* 82: 61-70
10. H. Taher, S. Al-Zuhair, A. AlMarzoqui, Y. Haik and M. Farid (2014) Mass Transfer Modelling of *Scenedesmus* sp. Lipids Extracted by Supercritical CO₂. *Biomass and Bioenergy (Elsevier)* 70, 530-541
11. H. Taher, S. Al-Zuhair, A. AlMarzoqui, Y. Haik and M. Farid (2014) Enzymatic biodiesel production of microalgae lipids under supercritical carbon dioxide: Process optimization and integration. *Biochemical Engineering Journal (Elsevier)* 15, 103-113
12. M. Al Ahmad, S. Al-Zuhair, H. Taher, A.H. Alnaqbi (2014) RF Microalgal lipid content characterization. *Scientific Reports (Nature Journal)* 4: 5108
13. H. Taher, S. Al-Zuhair, A. AlMarzoqui, Y. Haik and M. Farid (2014) Effective Extraction of Microalgae Lipids from Wet Biomass for Biodiesel Production. *Biomass and Bioenergy (Elsevier)* 66, 159-167
14. M.H. El-Naas, S. Al-Zuhair, M. Abu AlHaija (2014) Evaluation of a Three-Step Process for the Treatment of Petroleum Refinery Wastewater. *Journal of Environmental Chemical Engineering (Elsevier)* 2, 56-62
15. H. Taher, S. Al-Zuhair, A. AlMarzoqui, Y. Haik, M. Farid and S. Taeqi (2014) Supercritical carbon dioxide extraction of microalgae lipid: process optimization and laboratory scale-up. *Journal of Supercritical Fluids (Elsevier)* 86, 57- 66
16. M.H. El-Naas, S. Al-Zuhair, A. Al-Lobaney (2013) Treatment of petroleum refinery wastewater by continuous electrocoagulation. *International Journal of Eng. Research & Technology* 2, 2144-2150
17. I.B. Hashim, S. Al Nuaimi, H.S. Afifi, H. Taher, S. Al-Zuhair, Ali Al-Marzouqi (2013) Quality Characteristics of Low Fat Lamb Meat Produced by Supercritical Carbon Dioxide Extraction. *Global Journal of Biology, Agriculture and Health Sciences* 2, 5-9
18. S. Al-Zuhair, M. Al-Hosany, Y. Zooba, A. Al-Hammadi, S. Al-Kaabi (2013) Development of a Membrane Bioreactor for Enzymatic Hydrolysis of Cellulose. *Renewable Energy (Elsevier)* 56, 85-89
19. S. Al-Zuhair, K. Ahmed, A. Abdulrazak, M.H. El-Naas (2012) Synergistic Effect of Pretreatment and Hydrolysis Enzymes on the Production of Fermentable Sugars from Date Palm Lignocellulosic Waste. *Journal of Industrial and Engineering Chemistry (Elsevier)* 19, 413-415
20. S. Al-Zuhair, Hassan Noura and Abbas Fardoun (2012) Utilization of Date-pits in Transformer Oil Chemical Regeneration. *International Journal of Sustainable Energy Development (Informatics Society)* 1, 46-50
21. S. Al-Zuhair and M. El-Naas (2012) Phenol Biodegradation by *Ralstonia pickettii* Extracted from Petroleum Refinery Oil Sludge. *Chemical Engineering Communications (Taylor & Francis)* 199, 1194-1204

22. S. Al-Zuhair, A.Hussein, A.H. Al-Marzouqi, and I. Hashim (2012) Continuous Production of Biodiesel from Fat Extracted from Lamb Meat in Supercritical CO₂ Media. *Biochemical Engineering Journal* (Elsevier) 60: 106-110
23. S. Al-Zuhair, M. El-Naas (2011) Immobilization of *Pseudomonas putida* in PVA gel particles for the biodegradation of phenol at high concentrations. *Biochemical Engineering Journal* (Elsevier) 56: 46-50
24. H. Taher, S. Al-Zuhair, A. AlMarzoqui, Y. Haik and M. Farid (2011) A Review of Enzymatic Transesterification of Microalgal Oil Based Biodiesel using Supercritical Technology. *Journal of Enzymes Research* (SAGE-Hindawi) Article ID 468292
25. H. Taher, S. Al-Zuhair, A. Al-Marzouqui, I. Hashim (2011) Extracted Fat from Lamb Meat by Supercritical CO₂ as Feedstock for Biodiesel Production. *Biochemical Engineering Journal* (Elsevier) 55: 23-31
26. S. Al-Zuhair, A. Almenhali, I. Hamad, M. Alshehhi, N. AlSuwaidi and S. Mohamed (2011) Enzymatic Production of Biodiesel from Used/Waste Vegetable Oils: Design of a Pilot Plant. *Renewable Energy* (Elsevier) 36: 2605-2614
27. M.H. El-Naas, A.I. Mourad, S. Al-Zuhair, R. Surkatti (2010) Characterization of polyvinyl alcohol (PVA) gel as support formicrobial immobilization. *Special Abstracts/Journal of Biotechnology* (Elsevier) 150S: S1-S576
28. M.H. El-Naas, S. Al-Zuhair, M. Abu AlHaija (2010) Removal of phenol from petroleum refinery wastewater through adsorption on date-pit activated carbon. *Chemical Engineering Journal* (Elsevier) 162: 997-1005
29. S. Al-Zuhair, A. Dowaidar and H. Kamal (2010) Inhibitory effect of dates-extract on α -amylase and α -glucosidase enzymes relevant to non-insulin dependent diabetes mellitus. *Journal of Biochemical Technology* (Sevas publishing) 2:158-160
30. M.H. El-Naas, S. Al-Zuhair and Suzan Makhoulf (2010) Continuous biodegradation of phenol in a Spouted Bed Bioreactor (SBBR). *Chemical Engineering Journal* (Elsevier) 160: 565-570
31. M.H. El-Naas, S. Al-Zuhair and Suzan Makhoulf (2010) Batch Degradation of phenolin a Spouted Bed Bioreactor System. *Journal of Industrial and Engineering Chemistry*(Elsevier) 16: 267-272
32. M.H. El-Naas, S. Al-Zuhair and M. Abualhaija (2010) Reduction of COD in refinery wastewater through adsorption on Date-Pit activated carbon. *Journal of Hazardous Materials* (Elsevier) 173:750-757
33. M.H. El-Naas, S. Al-Zuhair, A. Al-Lobaney and S. Makhoulf (2009) Assessment of Electrocoagulation for the Treatment of Petroleum Refinery Wastewater. *Journal of Environmental Management*(Elsevier) 91: 180-185
34. H. Al-Attar and S. Al-Zuhair (2009) A General Approach for Deliverability Calculations of Gas Wells. *Journal of Petroleum Science and Engineering* (Elsevier) 67: 97-104
35. S. Al-Zuhair, A. Dowaidar and H. Kamal (2009) Dynamic Modeling of Biodiesel Production from Simulated Waste Cooking Oil Using Immobilized Lipase. *Biochemical Engineering Journal* (Elsevier) 44: 256-262
36. H. Al-Attar and S. Al-Zuhair (2009) A Simplified Approach for Predicting Gas Well Performance. *Journal of Petroleum Science and Engineering*(Elsevier) 65: 51-61
37. S. Al-Zuhair, M.H. El-Naas and H. Al-Hassani (2008) Sulfate Inhibition Effect on Sulfate Reducing Bacteria. *Journal of Biochemical Technology* (Sevas publishing) 1: 39-44

38. S. Al-Zuhair (2008) Enzymatic Production of Bio-diesel from Waste Cooking Oil Using Lipase. *Open Chemical Engineering Journal*(Bentham) 2: 84-88
39. S. Al-Zuhair, K.B. Ramachandran and M. Hasan (2008) Effect of Enzyme Molecules Covering of Oil-Water Interfacial Area on the Kinetic of Oil Hydrolysis. *Chemical Engineering Journal* (Elsevier) 139: 540-548
40. S. Al-Zuhair (2008) The effect of Crystallinity of Cellulose on the Rate of Reducing Sugars Production by Heterogeneous Enzymatic Hydrolysis. *Bioresource Technology* (Elsevier) 99: 4078-4085
41. S. Al-Zuhair (2007) Production of Biodiesel: Possibilities and Challenges Review Paper. *Biofuels, Bioproducts and Biorefining* (J. Wiley) 1: 57-66
42. S. Al-Zuhair, W.L. Fan and S.J. Lim (2007) Proposed Kinetic Mechanism of the Production of Biodiesel from Palm Oil Using Lipase. *Process Biochemistry* (Elsevier) 42: 951-960
43. S. Al-Zuhair, Y.L. Fan, K.S. Chui and S. Rizwan (2007) Kinetics of *Aspergillus niger* Cellulase Inhibition by Reducing Sugar Produced by the Hydrolysis of Carboxymethylcellulose. *Int. J. of Chemical Reactor Engineering*. (Berkeley) 5: A7
44. M. Shamel, K.B. Ramachandran, M. Hasan and S. Al-Zuhair (2007) Hydrolysis of Palm and Olive Oils by Immobilised Lipase Using Hollow-Fibre Reactor. *Biochemical Engineering Journal* (Elsevier) 34: 228–235
45. M.T. Al-Atabi, S. Al-Zuhair, S.B. Chin and X.Y. Luo (2006) Pressure Drop in Laminar and Turbulent Flows in Circular Pipe with Baffles – An Experimental and Analytic Study. *International Journal of Fluid Mechanics Research* (Begell House) 33: 303-319
46. K.B. Ramachandran, S. Al-Zuhair, C.S. Fong and C.W. Gak (2006) Kinetic study on hydrolysis of oils by lipase with ultrasonic emulsification. *Biochemical Engineering Journal* (Elsevier) 32: 19-24
47. S. Al-Zuhair, K.V. Jayaraman, S. Krishnan and W.H. Chan (2006) The Effect of Fatty Acid Concentration and Water Content on the Production of Biodiesel by Lipase. *Biochemical Engineering Journal* (Elsevier) 30: 212-217
48. S. Al-Zuhair (2006) The Effect of Substrate Concentrations on the Production of Biodiesel by Lipase-Catalysed Transesterification of Vegetable Oils. *Journal of Chemical Technology and Biotechnology* (J. Wiley) 81: 299-305
49. S. Al-Zuhair (2006) Kinetics of Hydrolysis of Tributyrin by Lipase *Journal of Engineering Science and Technology* 1: 50-58
50. S. Al-Zuhair (2005) Production of Biodiesel by Lipase-Catalysed Transesterification of Vegetable Oils: A Kinetics Study. *Biotechnology Progress*(AIChE Journal) 21:1442-1448
51. M. Shamel, S. Al-Zuhair and R. Azaha (2005) Adsorption of Lipase on Hollow Fibre Membrane Chips. *Int. Journal of Artificial Cells, Blood Substitutes, and Biotechnology* (Taylor & Francis) 33: 423-433
52. T. Yusaf, S. Al-Zuhair and M. Al-Atabi (2005) Performance of Diesel Engine Using an Emulsion of Biodiesel-Conventional Diesel Fuel. *Mechanical Engineering*. 56:137-142
53. S. Al-Zuhair, M. Hasan and K.B. Ramachandran (2004) High Enzyme Concentration Model for the kinetics of Hydrolysis of Oils by Lipase. *Chemical Engineering Journal* (Elsevier) 103: 7-11
54. S. Al-Zuhair, K.B. Ramachandran and M. Hasan (2004) Investigation of the Specific Interfacial Area of Palm Oil/Water System. *Journal of Chemical Technology and Biotechnology* (J. Wiley) 79: 706-710

55. S. Al-Zuhair, M. Hasan and K.B. Ramachandran (2004) Unsteady State Kinetics of Lipolytic Hydrolysis of Palm Oil in a Stirred Liquid-liquid Bioreactor. *Biochemical Engineering Journal* (Elsevier) 19:81-86
56. S. Al-Zuhair(2004) Using Liquid-liquid Deep Settling Model in Determining the Design Parameters of Crude Palm Oil Settler. *Separation and Purification Technology* (Elsevier) 35: 133-140
57. S. Al-Zuhair, Y.A. Abakr and M.I. Ahmed (2004) The Effect of the Operating Conditions on the Apparent Viscosity of Crude Palm Oil During Oil Clarification. *IIUM Journal of Engineering*. 5: 55-64
58. S. Al-Zuhair, M. Hasan and K.B. Ramachandran (2003) Kinetic Hydrolysis of palm Oil Using Lipase. *Process Biochemistry*(Elsevier) 38: 1155-1163

D. Education Papers

1. S. Al-Zuhair, A. Fardoun, M. Nour (2014) Renewable Energy Education for Engineering Freshman Students. *Asian Journal of Education and e-Learning* 2: 173-184
2. N. Eid and S. Al-Zuhair (2015) Evaluation of the Use of iPad in Teaching General Chemistry Lab to Freshman Students. *Journal of Engineering Science and Technology*, 10: 249-257

E. Editorials and Magazine Articles

1. S. Al-Zuhair, K. B. Ramachandran, M.Farid, M.K. Aroua, P. Vadlani, S. Ramakrishnan and L. Gardossi (2011)Editorial: Enzymes in Biofuels Production. *Journal of Enzymes Research* (SAGE-Hindawi)2011, Article ID 658263
2. S. Al-Zuhair (2006) The Role of Engineers in Biotechnology. *Doctor Job*, 9: 22-23

F. Conference Papers (33 papers)

1. S. Al-Zuhair, S. Al-Ketbi, M. Djama, M. Al-Marzouqi (2016) Regeneration of amine solution using microalgae for absorption. 2nd World Chemistry Conference, Toronto, Canada
2. S. Al-Zuhair, S. Ashraf, S. Hisaindee, N. Al Darmaki, S. Battah, D. Svistunenko, B. Reeder, G. Stanway, A. Chaudhary (2015) Enzymatic pretreatment of microalgae for enhanced proteins extraction, Dubai Bio Summit & Expo, Dubai, UAE
3. H. Taher, S. Al-Zuhair, A. AlMarzoqui, Y. Haik and M. Farid (2015) Properties of Biodiesel Produced by Enzymatic Transesterification of Lipids Extracted from Microalgae in Supercritical Carbon Dioxide Medium. the International Conference on Biotechnology, Chemical Engineering and Life Science (ICBCELS 2015), Barcelona, Spain
4. L. Saqer, M. AlAhmed, S. Al-Zuhair, H. Taher and A. AlNaqbi (2015) Monitoring of Microalgae Lipid Accumulation System Overview. 8th IEEE GCC Conference & Exhibition, Muscat, Oman
5. H. Taher, S. Al-Zuhair, A. AlMarzoqui, Y. Haik and M. Farid (2014) Biodiesel Production from microalgae oil. 3rd International Conference on Renewable Energy: Generations and Applications 2014, AlAin, UAE
6. H. Taher, S. Al-Zuhair, A. AlMarzoqui, Y. Haik and M. Farid (2012) Using SC-CO₂ for the extraction of lipids from microalgae. 63rd Canadian Chemical Engineering Conference 2013, Fredericton, New Brunswick, Canada
7. S. Al-Zuhair, K. Ahmed, A. Abdulrazak (2012), Enzymatic Pretreatment of Date Palm Lignocellulosic Waste for Bioethanol Production. 62nd Canadian Chemical Engineering Conference2012, Vancouver, British Columbia

8. S. Al-Zuhair, M. Al-Hosany, Y. Zooba, A. Al-Hammadi, and S. Al-Kaabi (2012) Design of Membrane Bioreactor for Enzymatic Hydrolysis of Cellulose. 2nd International Conference in Renewable Energy: Generation and Applications 2012, Al-Ain, UAE
9. S. Al-Zuhair, M. AlSheraifi, H. AlShamsi, N. AlBraik, A. Suwaidi, S. AlJahori (2011) Enzymatic Production of Biodiesel from Waste Cooking Oil. International Conference on Water, Energy and Environment 2011, Sharjah, UAE
10. S. Al-Zuhair, H. Noura, A. Fardoun (2011) Using Activated Carbon from Waste Date-pits as an Adsorbent for Transformer Oil Regeneration. The World Congress on Sustainable Technologies (WCST-2011) London, UK
11. S. Al-Zuhair (2010) Introducing Biotechnology to the Chemical Engineering Curriculum at UAE University. 5th International Forum on Engineering Education (IFEE2010) & European SDPROMO II Conference, Sharjah, UAE
12. M.H. El-Naas, A.I. Mourad, S. Al-Zuhair, R. Surkatti (2010) Characterization of polyvinyl alcohol (PVA) gel as support for microbial immobilization. 14th International Biotechnology Symposium and Exhibition, Rimini, Italy
13. M.H. El-Naas, S. Al-Zuhair, M. A. Alhaija (2010) Adsorption of Organic Contaminants on Date-Pit Activated Carbon. The 13th Asia Pacific Confederation of Chemical Engineering Congress APCCChE 2010, Taipei
14. S. Al-Zuhair, A. AlMenhali, I. Hamad, M. AlShehhi, N. AlSuwaidi, S. Mohamed (2010) Enzymatic Production of Biodiesel from Used/Waste Vegetable Oils: Design of a Pilot Plant, International Conference on Renewable Energy: Generation and Application ICREGA10, Al-Ain, UAE
15. M.H. El-Naas, S. Al-Zuhair, S. Abdulla, S. Makhoulf (2009) Phenol Bioremoval using Spouted Bed Bioreactor. 8th World Congress of Chemical Engineering, Montreal, Canada
16. M.H. El-Naas, S. Al-Zuhair, A. Al-Lobaney, S. Makhoulf (2009) Treatment of Refinery Wastewater by Electrocoagulation. 10th Annual UAE University Research Conference, Al-Ain, UAE
17. M.H. El-Naas, S. Al-Zuhair, M. Abu-Alhaija (2009) Refinery Wastewater Treatment using BDH and Date-Pit Activated Carbons. 10th Annual UAE University Research Conference, Al-Ain, UAE
18. S. Al-Zuhair (2009) Kinetics of Heterogeneous Enzymatic Hydrolysis of Cellulose. 3rd Int. Conference on Modeling, Simulation and Applied Optimization, Sharjah, U.A.E
19. M.H. El-Naas, S. Al-Zuhair and S. Makhoulf (2008) Experimental Evaluation of a Spouted Bed Bioreactor for the Removal of Phenol from Refinery Wastewater. 9th Annual UAE University Research Conference, Al-Ain, UAE, pp 234 -241
20. S. Al-Zuhair, M.H. El-Naas and H. Al-Hassani (2008) A Kinetic Study on Anaerobic Removal of Sulphate using Sulphate Reducing Bacteria. The Ninth Annual UAE University Research Conference, Al-Ain, UAE, pp 113-118
21. S. Al-Zuhair (2008) Kinetics of Production of Biodiesel from Waste Cooking Oil Using Lipase Immobilized on Ceramic Beads. 9th Annual UAE University Research Conference, Al-Ain, UAE, pp 101-105
22. H. Al-Attar and S. Al-Zuhair (2008) A General Approach for Deliverability Calculations of Gas Wells. Society of Petroleum Engineering Technical Conference and Exhibition for North Africa, Marrakech, Morocco (SPE # SPE-111380-PP)

23. S. Al-Zuhair, W.L. Fan and S.J. Lim (2007) Proposed Kinetic Mechanism of Production of Biodiesel from Palm Oil Using Lipase. Symposium of Malaysian Chem. Engineers 07, UPM, Malaysia, Paper ID: OT001
24. S. Al-Zuhair (2006) Kinetics of Enzymatic Production of Biodiesel from Sunflower Oil Using Lipase. Bio-energy 06, British Colombia, Canada
25. S. Al-Zuhair, K.V. Jayaraman, S. Krishnan and W.H. Chan (2006) Effect of Fatty Acid and Water Concentrations on the Production of Biodiesel by Lipase 11th Asia Pacific Congress of Chemical Engineering 06, Kuala Lumpur, Malaysia, Paper ID: 376
26. S. Al-Zuhair, D. Isa and M. Nour (2006) The Use of Immobilised Lipase for the Production of Biodiesel from Waste Palm Oil: Possibilities and Challenges. 11th Asia Pacific Congress of Chemical Engineering 06, Kuala Lumpur, Malaysia, Paper ID: 38
27. S. Al-Zuhair, K.B. Ramachandran and M. Hasan (2005). Unsteady State and High Enzyme Concentration Kinetic Models for Hydrolysis of Palm Oil by Lipase. 2nd International Conference on Chemical and Bioprocess Engineering 05, Sabah, Malaysia, pp 8 – 13
28. S. Al-Zuhair, M. Hasan and K.B. Ramachandran (2003) Interfacial Effects on Hydrolysis of Palm Oils by Lipase. Int. Conf. on Chemical and Bioprocess Engineering 03, Sabah, Malaysia, Vol. 1, pp 266-269
29. S. Al-Zuhair, M. Hasan and K.B. Ramachandran (2002) Comparison Between Autotitrator and Gas Chromatograph Methods for Studying the Enzymatic Hydrolysis of Palm Oil Using Lipase. Regional Symposium of Chemical Engineers 02, Kuala Lumpur, Malaysia, Vol. 1, pp. 201-207
30. S. Al-Zuhair, M. Hasan and K.B. Ramachandran (2002) Enzymatic Hydrolysis of Palm Oil in a Stirred Liquid-Liquid Reactor. TECHPOSo2, Kuala Lumpur, Malaysia. pp 97-101
31. S. Al-Zuhair, K.K. Tan and M. Daud (1999) Using Liquid-liquid Deep Settling Model in Determining the Design Criteria of Crude Palm Oil Settlers, World Engineering Congress 1999, K.L., Malaysia, pp 89-94
32. S. Al-Zuhair, K.K. Tan and M. Daud (1999) Simultaneous Liquid-liquid and Solid-liquid settling in Raw Palm Oil Settlers, World Engineering Congress 1999, K.L., Malaysia, pp 141-144
33. S. Al-Zuhair, K.K. Tan and M. Daud (1999) Dependence of the Apparent Viscosity of Crude Palm Oil on Temperature, World Engineering Congress 1999, K.L., Malaysia, pp 145-147