

CURRICULUM VITAE

Ibrahim Ashour

PERSONAL INFORMATION

Country of Citizenship: Egyptian

Address Department of Chemical Engineering
Faculty of Engineering
Minia University
Elminia
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EDUCATION:

March 1987-Dec. 1989: Ph.D., Chemical Engineering, Lund University, Sweden
March 1983-May 1987: Licentiate, Chemical Engineering, Lund University, Sweden
June 1980-March 1983: M. Sc., Chemical Engineering, Cairo University, Egypt
Aug. 1973-March 1977: B.Sc., Chemical Engineering, Cairo University, Egypt

EMPLOYMENT INFORMATION

2014-present Adj. Professor, Environmental Eng., Zewail City University of Science and Technology
2000 –present Professor, Department of Chemical Engineering, Minia University, Egypt
2011-2014 Professor and Head of Department of Chemical Engineering
British University in Egypt, El Sherouk, Egypt
2000 –2009 Professor, Department of Chemical Engineering, Minia University, Egypt
2005-2011 Chairman/Assoc. Prof. Department of Petroleum and Chemical Engineering
Sultan Qaboos University, Oman (Chairman since June. 2006 up to 31/08/2010)
2008 Acting Dean for the College of Engineering, Sultan Qaboos University for two month
1998 - 2005 Associate Professor, Department of Chemical and Petroleum Engineering
UAE University, UAE
1996 - 1997 Assistant Professor, Department of Chemical Engineering
King Fahd University of Petroleum and Minerals, Saudi Arabia
1995 – 2000 Associate Professor, Department of Chemical Engineering,
Elminia University, Egypt
1991 - 1995 Assistant Professor, Department of Chemical Engineering,
Elminia University, Egypt
1990 - 1991 Research Associate, Lund University, Sweden
1983 - 1989 Graduate Research Assistant, Chemical Engineering Dept. I,
Lund University, Sweden.
1979 - 1983 Graduate Teaching Assistant, Department of Chemical Engineering,
Elminia University, Egypt.

AWARDS AND RECOGNITION:

1. Lund University Scholarship for Ph.D. (1983-1987).
2. Government of Egypt Scholarship for one year (1987-1988).
3. Distinguished Scholar, Cairo University, Dep. of Chemical Eng. (1974-1977).

CONSULTING EXPERIENCE:

1. Consultation to Abu Dhabi National Oil Company (ADNOC), UAE: Through contract No. 02-7-51/98
2. Consultation to Science & Technology Cooperation, Egypt: through Contract No. 263-0140.1
3. Consultation to CHEMONICS Egypt (1992-1995)

EDUCATION METHODOLOGY/PROCESS DEVELOPMENT

ABET Accreditation: I have practiced ABET accreditation at KFUPM, UAEU and SQU since 1996. In UAE University I was responsible for the process of Education Outcome Assessment as part of preparations for re-accreditation. I have led the accreditation process for the Chemical Engineering program in SQU. The Chem. Eng. Program was accredited for 6 years under my leadership. The quality assurance is a continuous process.

UK Validation: I have practiced the UK validation with two Universities Aberdeen and London South Bank University (LSBU) at British University in Egypt. Chemical Engineering Program with two majors has been validated from LSBU 2013.

Curriculum: **In Elminia University** since Sep., 2016 I developed an integrated postgraduate curriculum and undergraduate curriculum for Chemical Engineering Program. Study plan and Catalog Description for all courses have developed. Courses outlines are in progress.
In Zewailcity University of Science and Technology since June 2014, I developed an integrated curriculum of Environmental Engineering Program. Study plan and Catalog Description for all courses have developed. Courses outlines are in progress. I shared my Colleagues in developing the Curricula of Renewable Energy Engineering, Energy and Bioprocessing Engineering, and Nanotechnology Engineering.

In British University in Egypt (BUE), since 2012 I developed the integrated curriculum of Chemical Engineering Program. Further, I engaged fully in the development of the integrated curriculum of Chemical engineering program and Petroleum and Natural Gas Engineering Program in SQU. Furthermore, in UAEU, since 1998 an active member for a committee for developing the Curriculum to comply

with ABET accreditation systems. The Petroleum Program was accredited by ABET for 6 years and Chemical Program will be evaluated this year by ABET. Heavy work was conducted on development of course Syllabi and performances to meet ABET A-K outcomes. Moreover, I engaged fully in the development of Department of Chemical Engineering Curriculum in UAE University and Elminia University, Egypt.

E-Learning:

Four courses using Learning Management System have been designed. In UAE University I used first WebCT and transferred the information to Blackboard. Now I use WebCT and MOODLE in SQU.

Active learning methodology has been applied fully in chemical engineering thermodynamics. Five E model and problem solving methodology have been used. In addition to Learning Management System (MOODLE) has been applied. I have used one group experimental design (pre-and post exam) to study the student performance after using active learning approach (Problem Solved Approach).

Courses Taught:

- * Developed Courses including all Materials and Communication (Using WebCT and MOODLE; Knowledge processing software)

Undergraduate Courses:

Zewail City University of Science and Technology

1. ENV 359 Bioprocess Engineering
2. ENV 207 Materials and Energy Balances
3. ENV 346 Heat Transfer
4. ENGR 102 Introduction of Engineering Design

Sultan Qaboos University:

1. CHPE 4112 Chemical Engineering Thermodynamics*
2. CHPE 3302 Fluid Flow*
3. CHPE 4612 Unit Operation II* (Separation processes)
4. CHPE 3102 Engineering Thermodynamics*
5. CHPE 5312 Graduation Project I
6. CHPE 5512 Graduation Project II
7. CHPE 5612 Chemical Process Safety*
8. CHPE 3402 Heat Transfer
9. CHPE 5412 Plant and Process Design*
10. ENGR 3006, 4006 Industrial Training I and II

Other Universities (BUE, UAE, KFUPM, Elminia)

1. Fundamentals of Engineering II
2. Introduction of Chemical Engineering
3. Transport Phenomena II (Heat Transfer)
4. Transport Phenomena III (Mass Transfer)
5. Chemical Engineering Thermodynamics
6. Process Modeling and Simulation
7. Computer Applications in Chemical Engineering
8. Natural Gas Processing
9. Surface Petroleum Operations
10. Chemical Process Industries
11. Process Control
12. Graduation Projects
13. Special Topics (Environmental Engineering)

Co-Taught Courses (By Colleges of Science and Engineering)

1. CHEM 1252 General Chemistry and Engineering Applications
2. CHEM 250 Physical Chemistry and Engineering Applications I

Graduate Courses:

1. WATR 601 Water Resources
2. Water Quality*
3. Thermal Desalination*
4. Industrial Wastewater Treatment*
5. Special Topics (Biological System Simulation)*
6. Special Topics (Adsorption)*
7. Transport Phenomena
8. Process Modeling and Simulation
9. Advanced Thermodynamics
10. Special Topics

Theses and Project Supervision:

B. Sc. (Final Year Projects): 25 (SQU, UAEU, KFUPM, Elminia University)
M. Sc.: 20 (3 UAEU, Cairo University, Elminia University)
Ph. D. 12 (Cairo University, Elminia University)

Undergraduate Student Advising

2005-Present 25 at SQU
1998-2005 more than 50 at UAEU.

To be an efficient advisor one should build a friendly relation with the student and be available for him. Based on Professor Bird's say in his education paper in Chemical Engineering Education: "One must be a servant for his student". A story of my student along the line who was on probation: I started to talk friendly and be close to him with encouragement and I told him "let start a friendly relation, he had a course with me in the same semester. I asked him to pass by at any time. At the end of this semester he got all grades above C. Next semester he told me I would struggle to raise my GPA to study M. Sc. and he could achieve the GPA to join his Master. I discussed with his Master Advisor, he told me your student is hard working and he wanted to develop his career.

Postgraduate Student Advising

2000-2005	30 (UAEU)
2005-2010	40 (SQU)

SERVICES

Committees

Sultan Qaboos University

College of Engineering:

College Board

Role: Departmental Representative (2006-Present)

Executive Committee

Role: Departmental Representative (2006-Present)

College Journal (The Journal of Engineering Research)

Role: Associate Editor (2005-Present)

Accreditation and Curriculum Committee

Role: Departmental Representative (2005-2011)

College Accommodation Committee

Role: Department Representative (2007-2010)

Promotion Committee

Role: Departmental Representative (2006-2010)

Department of Petroleum and Chemical Engineering

Head of the Department (2006-Present)

Promotion Committee
Role: Chairman (2006-Present)

Industrial Advisory Board
Role: Chairman (2006-Present)

Curriculum and Accreditation Committee
Role: Member (2005-2006), Chairman (2006-Present)

Appointment Committee
Role: Member (2005-2006), Chairman (2006-Present)

Undergraduate advisor
Role: Advisor (2005-Present)

UAE University

University:

University Textbook Committee Role:
Chairman (2002-2005)

University Graduate studies Committee
Role: Member (2002-2005)

College of Engineering:

Textbook Committee
Role: Departmental Representative (200-2002) - Chairman (2002-2005)

Graduate Studies Committee
Role: Departmental Representative (2001-2003)

Chemical and Petroleum Engineering:

Accreditation Committee
Role: Member (1998-2005)

Staff Recruitment Committee
Role: Member (2003-2005)

Graduate Studies Committee
Role: Member (2000-2005)

Curriculum Committee
Role: Member (2000-2004)

Undergraduate advisor
Role: Advisor (1998-2005)

International Professional Service and Scholarly Societies:

1. The Egyptian Association of Chemical Engineers, Cairo, Egypt.
2. Instructor Association for Swedish University, Lund, Sweden.
3. Member of Egyptian Syndicate of Engineers
4. Egyptian Association of Chemical Engineering Steering Committee
5. Reviewer for research projects for Qatar National Research Fund (QNRF), Qatar.
6. Reviewer for research project for TRC, Oman
7. M Sc Examiner (SQU, UAEU, Elminia)
8. Ph. D. Examiner (Elminia)
9. Organizing Committee for International Environmental Design Contest (EDC 2000 & 2002), UAEU
10. Session Chair in International Conference on Vehicles Alternative Fuel Systems and Environmental Protection, VAFSEP 2004, 6th to 9th July 2004, Dublin City University, Ireland.
11. VAFSEP'06 International Advisory Committee, DCU, Ireland
12. Reviewer for Research Projects (SQU)
13. Reviewer for Emirates Journal for Engineering Research (EJER)
14. Reviewer of The Journal of Engineering Research (SQU)
15. Reviewer for Journal of Chemical Engineering Data
16. Reviewer for Industrial & Engineering Chemistry Research
17. Reviewer for World Journal Of Chemical Engineering
18. Reviewer for The Journal of Engineering Research
19. Reviewer for Chemical Product and Process Modeling
20. Reviewer for Chemical Engineering Journal
21. Reviewer for Biochemical Engineering Journal
22. Journal of Natural Gas Science and Engineering
23. Waste Management

Regional/Local Professional Service:

1. Associate-Editor for the Journal of Engineering Research (TJER), Sultan Qaboos University.
2. Reviewer for Scientific Reports for Umm Al Moumineen Association (Ajman, UAE)
3. Member in Environmental Research and Wildlife Development Agency (ERWDA), 2001 – 2005 Abu Dhabi, UAE
4. Member for Environmental Strategy Development for Abu Dhabi Emirate, UAE.

5. Presented seminars on “Active Learning” to College of Engineering Faculty Members; UAE University, Feb. 2004.
6. Presented a seminar on “Outcome based Assessment” to College of Engineering Faculty members, March 2007.

SCHOLARLY ACHIEVEMENTS:

Research Interests

1. Applied Thermodynamic and Separation Processes
2. Natural Gas
3. Solid Waste Management
4. Green Engineering (Supercritical Fluid Extraction, Wastewater Treatment, Ionic Liquids)
5. Microbial Fuel Cell
6. Chemical Engineering Education

Publications:**Book and Book Chapters:**

1. **Ashour**, I. ; Vakili-nezhaad, G.; Al-Rawahi, N.; Amin, S. Applications of Equations of State in the Oil and Gas Industry. In: "Thermodynamics / Book 2", ISBN 978-953-307-978-3, Juan Carlos Moreno Piraján (Book Editor), 2011
2. Nabeel Al-Rawahi, Gholamreza Vakili-Nezhaad, **Ibrahim Ashour**, Amin Fatemi, A New Correlation for Prediction of Viscosities of Omani Fahud-Field Crude Oils , Chapter 12 in Advances in Modeling of Fluid Dynamics, INTECK Publisher, 2012.

Refereed Journal Papers

1. El Geundi, M.S., Mohammed, A.A., Abdel Moamen, O.A, Metwaly, S.S., El—Kamash, **Ashour**, I. Utilization of modified attapulgitte clay for the removal of Sr(II), Co(II) and Ni(II) ions from multicomponent systems, Part I: Kinetic studies
2. Elhebshi, A., El Deab, M. S, El nemr, N., **Ashour**, I. CBG-HCl as a green corrosion inhibitor for low carbon steel in 0.5M H₂SO₄ with and without 0.1M NaCl. Desalination and Water Treatment, , 1-9, 2019.
3. Elhebshi, A., El Deab, M. S, El nemr, N., **Ashour**, I. Corrosion Inhibition Efficiency of Cysteine – Metal ions lends on Low Carbon Steel in Chloride – Containing Acidic Media. *Int. J. Electrochem. Sci.*, 14, 3897- 3915, 2019.
4. Abdel Raheem, A., Mahroos, A., Mahmoud, M.S., **Ashour**, I. Fabrication of Conductive Human Bio Nano Electrode from Graphene Oxide Modified with Polyvinyl Alcohol. IET, Accepted, 2018.
5. Abdel Raheem, A., Mahroos, A., Mahmoud, M.S., **Ashour**, I. Biosensor of Urine Analysis Based on Graphene Nano Sheet, *IJBBB Vol.8(1): 53-60 ISSN: 2010-3638*, 2018.
6. Hosney, H., Nadiem, B., **Ashour**, I., Mustafa, I., El-Shibiny A. Epoxidized vegetable oil and bio-based materials as PVC plasticizer, *J. Applied Polymer Science*, 135, 46270, 2018.
7. Abdelaziz, O.Y., Hosny, W.M., Mamdouh A. Gadalla, M.A., **Ashour**, F.H., **Ashour**, I., Hulteberg, C.P. Novel process technologies for conversion of carbon dioxide into methanol, *J. Carbon Dioxide Utilization*, 21, 52-63, 2017.
8. Sayed, A., **Ashour**, I., Gadallah, M. Optimal Design of Gas Fields Gathering System, *SPE Maintenance and Production*, Accepted 2017. .
9. Sayed, A., **Ashour**, I., Gadalla, M. Integrated Process Development for an Optimum Gas, *Chemical Engineering Research and Design*, 124, 114-123, 2017
10. Aboul –Fotouh, T.M., Mazen, O.A., **Ashour**, I. An Experimental Study on the Influence of Ethanol and Automotive Gasoline Blends. *Journal of Petroleum & Environmental Biotechnology*, 8(1), 318, 2017.

11. Saeed, S., Aboul-Fotouh, T.M., **Ashour, I.** A Current Viscosity of Different Egyptian Crude Oils: Measurements and Modeling Over a Certain Range of Temperature and Pressure, *Journal of Petroleum & Environmental Biotechnology*, 7:6, 2016
12. Mohamed, O., **Ashour, I.** Production of Bio-oil from Rice Straw, *Int. J. of Chem. Eng. And Environment Eng.*, 7(2), 101- 106, 2016.
13. **Ashour, I.** , Syed, E. S., Marwa M. Mohamed, M.M, Asma A. Mohamed, A.A., Abdelkareem, M.A. Application of Microbial Fuel Cell for Simultaneous Sugar wastewater treatment and electricity generation, *Int. J. of Chem. Eng. and Environment Eng.*, 7(2), 118-122, 2016.
14. Ashour, I., Altaher, H., Sawalha, F., Maraqah, M. A comparative study for the treatment of refinery synthetic wastewater containing phenol, *Science, Technology and Development*, 34(1), 16-26, 2015.
15. Fadali, O.A.; Nasser, M.M.; Ebrahim, E.I.; **Ashour, I.**; Shehata, N. Effect of lag-phase in the transition from oxic to noxic conditions on the performance of the sequencing batch reactor. *Int. J. Innovation and Applied Studies*, 7(1), 393-400, 2014.
16. Abdel Rahman, R. O.; Elmesawy, M.; Ashour, I.; Hung Y.-T. Remediation of NORM and TENORM contaminated sites –Review Article. *AIChE - Environmental Progress & Sustainable Energy Journal*, Accepted, 2013.
17. Vakili-Nezhaad, G.; Vatani, M.; Asghari, M.; **Ashour, I.** Effect of temperature on the physical properties of 1-butyl-3-methylimidazolium based ionic liquids with thiocyanate and tetrafluoroborate anions, and 1-hexyl-3-methylimidazolium with tetrafluoroborate and hexafluorophosphate anions. *J. Chem. Thermodynamics*, 54, 148–154, 2012
18. **Ashour, I.**; Abu Al-Rub, F.A.; Sheikha, D.; Volesky, B. Biosorption of Naphthalene from Refinery Simulated Wastewater on Blank Alginate Beads and Immobilized Dead Algal Cells. *Separation Science and Technology*, vol. 43, pp 2208-2224, 2008.
19. Sheikha, D.; **Ashour, I.**; Abu Al-Rub F.A. Biosorption of Zinc on Immobilized Green Algae. *TJER, The Journal of Engineering Research*, vol. 5, pp 20-29, 2008
20. Dowaidar, A.M.; El-Shahawi, M.S.; **Ashour, I.** Adsorption of Polycyclic Aromatic Hydrocarbons onto Activated Carbon from Non-Aqueous Media: 1. The Influence of the Organic Solvent Polarity. *Separation Science and Technology*, vol. 42, pp 1-14, 2007.
21. El-Naas, M.; Abu Al-Rub, F.A.; **Ashour, I.**; Al-Marzouqi, M. Effect of Competitive Interference on the Bio-sorption of Lead (II) by *Chlorella vulgaris*. *Chemical Engineering & Processing*, vol. 46, pp 1391–1399, 2007.
22. **Ashour, I.**, Abu Eishah, S. Liquid-Liquid Equilibria of Ternary and Six-Component Systems Including Cyclohexane, Benzene, Toluene, Ethylbenzene, Cumene, and Sulfolane at 303.15 K. *J. Chem. Eng. Data*, vol. 51, pp 1717-1722, 2006.
23. **Ashour, I.**, Abu Eishah, S. Liquid-Liquid Equilibria for Cyclohexane + Ethylbenzene + Sulfolane at (303.15, 313.15, and 323.15) K. *J. Chem. Eng. Data*, vol. 51, pp 859-863, 2006.

24. Abu Al-Rub, F.A.; El-Naas, M.; **Ashour, I.**; Al-Marzouqi, **M.** Biosorption of copper on *Chlorella Vulgaris* from single, binary and ternary metal solutions, *Process Biochemistry*, vol. 41, pp 457-464, 2006.
25. **Ashour, I.** Liquid-liquid equilibrium of MTBE-ethanol-water and MTBE-1-hexanol-water over temperature range of 288.15 to 308.15, *J. Chem. Eng. Data.* vol. 50, pp 113 – 118, 2005.
26. **Ashour, I.**; Abdulkarim, M.A. "Liquid-liquid equilibrium for the system heptane + o-xylene + DEG over the temperature range of 288.15 K to 318.15 K" *J. Chemical and Engineering Data.* vol. 50, pp 924 - 927. 2005.
27. Abu Al-Rub, F.A.; El-Naas, M.; Farid Benyahia, F.; **Ashour, I.** Biosorption of nickel on immobilized and non-immobilized algal cells, *Process Biochemistry*, vol. 39, pp 1769-1773, 2004.
28. Almehaideb, R; Abdul-Karim, M. A., **Ashour, I.**, Abdullatif, M. A. Application of the PR-EOS with Several C7+ splitting to model fluid Properties in a Large Two Phase Petroleum Reservoir, *Petroleum Science and Technology*, vol. 22, pp 1465-1489, 2004.
29. Almehaideb, R; Al-Khanbashi, A., Ashour, I., Abdullatif, M. A. A Systematic Approach to Enhance the Quality of PVT Experimental Data for Gas Condensate Reservoir Evaluation, *Japan Petroleum Institute J.* vol. 46, pp 203-206, 2003.
30. Almehaideb, R; **Ashour, I.**, El-Fattah, K.A. Improved K-value Correlation for UAE Crude Oil Components at High Pressures Using PVT Laboratory Data, *Fuel*, vol. 82, pp 1057-1065, 2003.
31. Darwish, N.A.; Al Zarooni, M.; Hilal, N. and **Ashour, I.** "Analysis and Evaluation of the Liquid-Liquid Equilibrium Data of the Extraction of Aromatics from Hydrocarbons by Tetraethylene Glycol", *J. Chemical Engineering Data*, vol. 48, pp 1614-1619, 2003.
32. Darwish, N.A.; Abdulkarim, M.; **Ashour, I.**; Dwaidar, A. M.; Athamneh, F.S. "Liquid-liquid equilibrium for the system water(1)-acetic acid (2)-n-heptanol(3) at 278.1, 293.1,303, and 313.1 K", *Fluid Phase Equilibria*, *Fluid Phase Equilibria*, vol. 200, pp 277-285, 2002.
33. **Ashour, I.**; Almehaideb, R.; Fateen, S.E.; Aly, G. "Representation of solid-supercritical fluid phase equilibria using cubic equations of state" *Fluid Phase Equilibria*, vol. 167, pp 41-61, 2000.
34. Moustafa, T.M.; **Ashour, I.**; Elnashaie S.S. "An integrated dehydrogenation-hydrogenation membrane reactor for the simultaneous production of styrene and cyclohexane." *Studies in Surface Science and Catalysis*, vol. 122, pp 229-236, 1999.
35. **Ashour, I.**; R. M. Abdulmonem, Fadali, O.A.; Slater, M.J.; Hashem, M.A. "Single liquid breakage probability and characteristic velocity in liquid-liquid systems in a rotating disc contactor" *Trans. Egyptian Society of Chemical Engineers (TESCE)*, 1999.
36. **Ashour, I.**; Ebrahiem, E.E. "A modified perturbed hard-sphere equation using soave's attractive term" *Alexandria Engineering J.*, vol. 38, pp D1-D15, 1999.

37. **Ashour, I.**; Khattab, I.A.; Ibrahim, I.E.; Mohey-El-Dean, A.M. "Effect of minimization routines on the predictions accuracy of the equilibrium state", Association of the Advancement of Modeling and Simulation Techniques in Enterprise (AMSE) J., vol. 57, pp 1-15, 1998.
38. **Ashour, I.**; Aly, G. "Effect of computation techniques for the equation of state binary interaction parameters on the prediction of binary VLE data" Computers and Chemical Engineering, vol. 20, pp 79-91, 1996.
39. Aly, G.; **Ashour, I.** "A modified perturbed hard-sphere equation of state", Fluid Phase Equilibrium, vol. 101, pp 137-156, 1994.
40. Ashour, I; Aly, G. "Representation of vapor-liquid equilibrium using selected equations of state" Fluid Phase Equilibrium, vol. 98, pp 55-69, 1994
41. **Ashour, I.**; Hammam, H. "Equilibrium solubility of pure mono-, di-, trilaurin in supercritical carbon dioxide: Experimental measurements and model prediction" J. Supercritical Fluids, vol. 6, pp 3-9, 1993
42. Aly, G.; **Ashour, I.** "Thermodynamic modeling for the oleochemical industry", Computers and Chemical Engineering, vol. 17, Suppl., pp S195-S202, 1993.
43. **Ashour, I.**; Aly, G. "Application of the perturbed hard chain equation of state for the simulation of the distillation processes in the oleochemical industries: Part II: Purification of glycerol", Separation Science and Technology, vol. 27, pp 1157-1169, 1992.
44. Aly, G.; **Ashour, I.** "Application of the perturbed hard chain equation of state for the simulation of the distillation processes in the oleochemical industries: Part I: Separation of fatty acids", Separation Science and Technology, vol. 27, pp 955-974, 1992.
45. **Ashour, I.** "A modified perturbed hard-sphere equation of state", Trans. Egyptian Society of Chemical Engineers (TESCE), vol. 18, pp 670-686, 1992.
46. Tayeb, A.M.; **Ashour, I.**; Mostafa, N.A. "Modeling as a tool for process control: Alcoholic fermentation", Energy Conversion Management, vol. 32, pp 491, 1991.
47. **Ashour, I.**; Wennersten, R. "The effect of solute-solute interaction on the calculation of phase equilibria for binary and ternary system using a perturbed hard-sphere equation of state", Technology Today, vol. 4, pp 222-226, 1991.
48. **Ashour, I.**; Wennersten, R. "Modified Carnahan-Starling-Soave equation for the calculation of vapor pressures for fatty acids" J. Supercritical Fluids, vol. 2, pp 73-79, 1989.

Submitted or in Preparation Papers

1. **Ashour, I.**; Dowaidar, A.M. Adsorption of Polycyclic Aromatic Hydrocarbons onto Activated Carbon from Non-Aqueous Media: 2.The Influence of PAHs Chemical Structure,

Refereed Conference Proceedings

1. Hosny, H., **Ashour**, I., Al-Sakkari, E.G. Synthesis of Non-Phthalate Plasticiser from Green Resources, 4th International Conference of Engineering Division, National Research Center, Cairo, Egypt Steps Towards Innovative Sustainable Development NRC-ICED 2018 May 6-8, 2018.
2. Sayed, A., **Ashour**, I., Gadalla, M. Development of an Optimum System to Stop Natural Gas Flaring, The 4th Int. Conf. on Advanced Sciences (ICAS4), Nov. 7 – 10, 2017, Hurghada, Egypt
3. **Ashour**, I., Gamal, M. Process Development For The Production Of Methanol From Carbon Dioxide Hydrogenation, The 4th Int. Conf. on Advanced Sciences (ICAS4), Nov. 7 – 10, 2017, Hurghada, Egypt
4. Abdelkareem M.A., Ashour, I., Mohamed, S., Mohamed, A.A. Photocatalytic water-splitting using TiO₂ for hydrogen production, The 4th Int. Conf. on Advanced Sciences (ICAS4), Nov. 7 – 10, 2017, Hurghada, Egypt
5. **Ashour**, I., Abdelaziz, A.A., Ebrahim, I.E., Nassar, M.M., Farag, T. Comparison of CO₂ and H₂S capture methods from natural gas, The 4th Int. Conf. on Advanced Sciences (ICAS4), Nov. 7 – 10, 2017, Hurghada, Egypt
6. **Ashour** et al. Synthesis and Utilization of Tungsten Nitride in Microbial Fuel Cell, 6 Int. Conference on Power and Energy Systems, Paris 15-18, ICPES-2016
7. Mohamed, O., **Ashour**, I. Production of Bio-oil from Rice Straw, (part of paper 1), 5th Int. Renewable Energy and Environmental Conference (IREEC-2016), July 11-13, Madrid, Spain.
8. **Ashour**, I., Syed, E. S., Marwa M. Mohamed, M.M, Asma A. Mohamed, A.A., Abdelkareem, M.A. Application of Microbial Fuel Cell for Simultaneous Sugar wastewater treatment and electricity generation, (part of paper 2), 5th Int. Renewable Energy and Environmental Conference (IREEC-2016), July 11-13, Madrid, Spain.
9. M.A. Abdelkareem, M.S. Mahmoud, Mohamad, R.O. Ali, Faiza A. Hamad, N.A.M. Barakat, I. **Ashour** Cobalt-Doped carbon nanofibers as effective ORR catalyst, European Fuel Cell Technology & Application Conference- Piero Lunghi Conference, December 16-18, 2015, Naples, Italy.
10. M.Vatania, G. Vakili-Nezhaad, I. **Ashour**, M. Asgharib. Application of Genetic Algorithm to Calculate the Binary Interaction and Non-Randomness Parameters of the NRTL model for Ternary Ionic Liquid Systems”, 7th International Chemical Engineering Congress & Exhibition, Kish, Iran, 21-24 November, 2011
11. Baawain M.S., A.M. Al-Futaisi, I. **Ashour**, A. Al-Omairi, and M. Al-Jabri. "Characterization of Industrial Wastewater in the Sultanate of Oman", The 4th International Conference on Healthy Water in Arab World, Cairo, Egypt (June 21-22, 2010).
12. **Ashour**, I.; Naser. J.T.; Sawalha, F.; Maraqah M. Experimental investigation of phenol removal from refinery synthetic

- wastewater. International Conference on Sustainable Energy and Environmental Protection, August 12-16, 2009, Dublin, Ireland.
13. **Ashour, I.**; Naser, J.T. Adopting problem solving approach in chemical engineering thermodynamics. Symposium on Engineering Education 2009, May 17-18, 2009, Al-Ain, UAE.
 14. Islam, M.R.; **Ashour, I.**; Zatzman, G.M. Comparison between two teaching methodologies. Futurelearning2008 Conference, March 27-29, 2008, Istanbul, Turkey.
 15. **Ashour, I.** Biosorption of Petroleum Priority Pollutants on Immobilized and Free Algal Cells, EniroArabia April 22-25, 2007, Bahrain.
 16. **Ashour, I.**; Sayed-Ahmed, T.S. Energy conservation for natural gas liquefaction process, VAFSEP2004, 6-9 July, 2004, Dublin, Ireland.
 17. **Ashour, I.**; Al-Marzouqi, A.H.; Hussein, H. E.-S. Supercritical Fluid Extraction of natural products from local plants, The Fifth Annual Research Conference at UAE University, May 2-3, 2004, Al-Ain, UAE.
 18. Almehaideb, R; **Ashour, I.**, El-Fattah, K.A. "Improved K-value Correlation for UAE Crude Oil Components at High Pressures Using PVT Laboratory Data", Abu Dhabi International Petroleum Exhibition & Conference", 13-16th October 2002. (Part of Paper #13)
 19. **Ashour, I.**; Hashem, M. A.; Elshayb, M.M.A. "Applicability of Solvent Extraction to Environmental Protection: Overview on solvent selection for phenol removal. Int. Conference of Engineering Role towards Better Environment, RETBE Dec. 18-22, 2002, Alex, Egypt.
 20. Almehaideb, R., Abdulkarim, M. A. and **Ashour, I.** "EOS Characterization of Fluid Properties in a Major Complex Two Phase Reservoir Using SCN C7+ Splitting". The Second Annual Research Conference at UAE University, Al-Ain, April 17-18, 2001, UAE. (Part of Paper 11)
 21. **Ashour, I.**; Darwish, N.A.; Abdulkarim, M.A.; Dwaidar, A.M.; Athamneh, F.S. "Liquid-liquid equilibrium for the system water(1)-acetic acid (2)-n-heptanol(3) at 278.1, 293.1,303, and 313.1 K". Annual AIChE meeting, Reno-Nevada, Nov. 4-9, (2001), USA. (Part of Paper 15)

22. **Ashour, I.**; Samir, T.; Fahmy, M. "Modeling, simulation, and optimization of natural gas liquefaction process". Annual AIChE meeting, Reno-Nevada, Nov. 4-9, (2001), USA.
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8. **Ashour**, I.; Wennersten, R., 1990. “Supercritical fluid extraction, LUTKDH/ (TKKA-7006)/ (1-117)/(1990)”, Department of Chemical Engineering I, Lund Institute of Technology, Lund University, Sweden
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Funded Projects

- 1 CO-PI (450,000.00 EUR) Nanotechnological Approach for the Development and Implementation of Microbial Fuel Cell for Energy Harvesting from Wastewater, RDI, MSR, European Aids, ENPI/2014/343-429
- 2 Co-Investigator (56,215.00 EUR) Developing skills in the field of integrated energy planning in Med Landscapes/ENEPLAN, ERASMUS+, Cooperation for innovation and the exchange of good practices, Capacity Building in Higher Education, Joint Projects, 1
- 3 Co-Investigator (US\$ 21,000) Complex Phase Equilibrium Calculations Using Genetic Algorithm, Project, CR/ENG/PCED/10/02.
- 4 **Co-Investigator** (US\$ 500,000) Experimental Investigating the Effectiveness of Implementing a New Design for the Crude Oil Degasser, Project, CR/ENG/MIED/09/04
- 5 PI (US\$13,500) Green Dearomatization of Petroleum Cuts, Project IG/ENG/PCED/09/03
- 6 **Co-Investigator (US\$ 243,525)** Investigating the Implication of Reusing Wastewater Effluents and Sludge on Public Health and the Environment: Risk Assessment and Quality Control, Strategic Project, SR-ENG-CIVL-08-01 Oman
- 7 **Co-Investigator (US\$ 16,580)** of research project entitled: “Selective Oxidation of Hydrogen Sulfide for Air Pollution Control.” SQU Contract No. IG/ENG/PCED/07/01

- 8 Principle Investigator** (US\$ 7,000) of research project entitled “Dearomatization of Petroleum Cuts” funded by the UAE University Research Council, during academic year 2004/2005
- 9 Co-Investigator** (US\$ 5,200) of research project entitled “Characterization of the Local Clays and Investigation of Their Suitability as Adsorbents and as Ion Exchange Resins in Water Treatment Processes.” funded by the UAE University Research Council, during academic year 2004/2005
- 10 Principle Investigator** (US\$ 5000) of research project entitled “Supercritical Fluid Extraction of Natural Products from Local Herbal and Medical Plants” funded by the UAE University Research Council, during academic year 2002/2003
- 11 Principle Investigator** (US\$ 7000) of research project entitled “Thermodynamic modeling and Evaluation of literature data on supercritical fluid-liquid equilibrium of essential oils”, funded by the UAE University Research Council, during academic year 2001/2002
- 12 Co-Investigator** (US\$ 7000) of research project entitled “Repeated Removal of Heavy Metals by Biosorption on Immobilized Algal Bio-mass,” funded by the UAE University Research Council, contract No. 14-7-11/02, during academic year 2001/2002
- 13 Co-Investigator** (US\$ 7300) of research project entitled “Competitive biosorption of copper, lead, and zinc from simulated wastewater” funded by the UAE University Research Council, during academic year 2001/2002
- 14 Co-Investigator** (US\$ 130,000.0) of the externally funded research project, entitled “EOS Characterization of UAE Crude in Presence of Sulfur,” funded by Abu Dhabi National Oil Company (ADNOC), contract No. 02-7-51/98. Seven technical reports were submitted and presented to the administration of Abu Dhabi National Oil Company (ADNOC). The project duration was from Oct. 1998 to May. 2002.
- 15 Co-Investigator** (US\$ 1,000,000) of the externally funded research project, entitled, “Chemically assisted primary treatment: Viability for wastewater treatment in Egyptian Communities” Funded by Science & Technology Cooperation, Egypt, contract No. 263-0140.1. Submitted several reports to Science and Technology Cooperation in Cairo, Egypt. The project duration was from Jan. 1994 to Jan. 1996.
- 16 Co-Investigator** of research project entitled “Evaluation of distillation processes performance in the oleochemical industry”, Joint research project with Prof. Gharib Aly, Dept of Chem. Eng. I, Lund Institute of Technology, Lund University, Sweden. Swedish Co. The project duration 1990-1991.
- 17 Co-Investigator** of research project entitled “Solubility measurements of mono-, di-, and triglycerides in supercritical carbon dioxide, and thermodynamic modeling using equation of state.”, Joint research project with Dr. Bjorn Sivik and Hagar Hammar, Dept. of Food Technology, Lund Institute of Technology, Lund University, Sweden. Swedish National Board for Technical Development, The Project Duration 1990-1991.

18 Co-Instigator (US\$ 500,000) of research project entitled “Supercritical Fluid Extraction”
Swedish National Board for Technical Development, The Project Duration 1982-1987.