

# CURRICULUM VITAE

#### **PERSONAL INFORMATION**

Name	Khaled Abdel Fattah Elshreef
Surname	Abdel Fattah
Nationality	Egyptian
Date of Birth	13-1-1973
Place of Birth	Oina- Egypt
Address	Petroleum and Natural Gas Engineering Department, College of Engineering, King Saud University, Riyadh, Kingdom of Saudi
	Arabia
	P.O. Box 800, Riyadh 11421, Saudi Arabia
E-Mail	kelshreef@ksu.edu.sa
	Khaled 65@hotmail.com
Websites	http://faculty.ksu.edu.sa/kelshreef personal
Telephone No.	(Mobil) +966-56146-1188,
I	(Work) +966-1-4676-866.
Occupation	Associate Professor in the Department of Petroleum and Natural
<b>I</b>	Gas Engineering Department. College of Engineering. King Saud
	University, Rivadh, Kingdom of Saudi Arabia
Membership of P	<b>rofessional societies</b> - Society of Petroleum Engineering of AIME - Society of Egyptian Engineers
ACADEMIC QU	ALIFICATION
Ph.D. in Petroleu	<b>m Engineering</b> , Cairo University, Egypt, November 2005.
Thesis Title	" Volatile Oil and Gas Condensate Fluid Behavior for
	Material Balance Calculations and Reservoir
	Simulation" November 2005, Cairo University
M.Sc. in Petroleu	<b>m Engineering</b> . Cairo University, Egypt, January 2000.
Thesis Title	"A 3-D Optimization Model for Planning Horizontal

Wells." January 2000, Cairo University

**B.Sc. of Petroleum Engineering**, Cairo University, Egypt, June 1995

Cumulative rate of Appreciation Distinction with Honour degree.

# COMPUTER & LAB. SKILLS

- Very good Knowledge of Windows
- Fortran Language.
- Very good skills in MicroSoft Office
- ECLIPSE and PVTi Software
- PVT Lab

# **TEACHING EXPERIENCE**

1. Associate Professor in the Department of Petroleum and Natural Gas Engineering, College of Engineering, King Saud University, Riyadh, Kingdom of Saudi Arabia From (2012- now), Teaching the following Courses:

Undergraduate

- PGE 520 Advanced Oil Well Drilling Engineering
- PGE 521 Advanced Drilling Fluids Engineering
- PGE 478 Directional and Horizontal Drilling and Well Control
- PGE 471 Drilling Engineering I
- PGE 496 Graduation Project I.
- PGE 497 Graduation Project II
- 2. Assistant Professor in the Department of Petroleum and Natural Gas Engineering, College of Engineering, King Saud University, Riyadh, Kingdom of Saudi Arabia from (Feb 2009- 2012), Teaching the following Courses:

Undergraduate

- PGE 520 Advanced Oil Well Drilling Engineering
- PGE 478 Directional and Horizontal Drilling and Well Control
- PGE 472 Drilling Engineering II
- PGE 471 Drilling Engineering I
- PGE 455 Transportation & Storage of Oil and Natural Gas
- PGE 381 Natural Gas Metering and Analysis Engineering
- PGE 362 Properties of Reservoir Fluids
- PGE 496 Graduation Project I.
- PGE 497 Graduation Project II.
- 3. Assistant Professor in the Department of Petroleum Engineering, Cairo University, Egypt, From (Oct 2005-Jan 2009), Teaching the following Courses:

Undergraduate

- Drilling Engineering I (3 time)
- Drilling Engineering II (4 time)
- Reservoir Rock and Fluids Property (2 time)

- Gas Reservoir Engineering (1 time)
- Gas Production Operation (1 time)
- Production Engineering II (2 time)

Postgraduate

- Advanced Drilling Engineering (3 time)
- Gas Reservoir Engineering (2 time)
- Natural Gas Basics (2 time)
- 4. Teaching Assistant in the Department of Petroleum Engineering, Cairo University, Egypt, From (Oct 2002- Sep 2005), Has assisted Staff in the following Courses:
  - Drilling Engineering I
  - Drilling Engineering II
  - Geologic of Earth
  - Reservoir Fluids & Rock Properties
  - Production and Petroleum Processing
  - Petroleum Reservoir Engineering
  - EOR
- 5. Research Assistant in the Department of Chemical and Petroleum Engineering, UAE University, United Arab Emirates, From (Nov 2000- Sep 2002). Work in PVT analysis project supported by ADNCO.
- 6. Teaching Assistant in the Department of Petroleum Engineering, Cairo University, Egypt, From (Oct 1955 Oct 2000), Has assisted Staff in the following Courses:
  - Drilling Engineering I
  - Drilling Engineering II
  - Geologic of Earth
  - Reservoir Fluids & Rock Properties
  - Production and Petroleum Processing
  - Petroleum Reservoir Engineering
  - EOR

### <u>RESERCH INTERESTING AREA AND SUPERVISION OF POSTGRADUATE</u> <u>STUDENTS</u>

- Tigh gas and shale gas reservoirs.
- Under balance drilling technology.
- The inflow performance relation ship for solution gas reservoirs.
- Fast and Efficient Sensitivity Calculation Using Adjoint Method for Field-Scale History Matching.
- Casing while drilling.
- Volatile Oil and Gas Condensate Fluid Behavior.

#### **Finished Postgraduate Thesis**

- 1. Salah E. M. ahmed, " Implementation of Underbalanced Drilling Technique in Egyptian Fields " M.Sc. Thesis, Cairo University, Egypt, January 2009
- 2. Mohamed Ali A. Elias, "New Inflow Performance Relationship for Solution-Gas Drive Reservoirs" M.Sc. Thesis, Cairo University, Egypt, April 2009
- Ramez Masoud Azmy, " Modified Sensitivity Calculation Approach Using the Adjoint Method for Computer-Assisted History Matching" M.Sc. Thesis, Cairo University, Egypt, July 2009
- 4. Seydou Sinde, " CWD & its Implementation in WD Fields of Egypt" M.Sc. Thesis, Cairo University, Egypt, July 2009
- 5. Shafeeg Omer Obaid Blkoor, "Experimental Investigation of the Influence of Drilling Fluid Filter Cake on Filtration Loss and Formation Damage" M.Sc. Thesis, King Saud University, KSA, January 2014
- 6. Ahmed Ali AlGobany, "Development of A Fracture Seal Material Using Crushed Date Palm Seeds for Oil and Gas Well Drilling Operations" M.Sc. Thesis, King Saud University, KSA, May 2019

### INDUSTRIAL EXPERIENCE

- 1- Research Assistant. In the Department of Chemical and Petroleum Engineering, UAE University, United Arab Emirates, From (Nov 2000- Sep 2002). Work in PVT analysis project supported by ADNCO.
- 2- Khalda Oil Company, 2006 2007

*Job Description:* Khalda works in the western desert area. Gas Reservoir rocks of Khalda fields in Western Desert are mainly dirty and highly fractured sandstone reservoirs. The goal of this job was to how to manage theses reservoirs and to make a recompletion plan of these gas reservoirs to increase the production.

3- Instructing many professional training courses for oil companies engineers in Egypt, Bahrain, Syria, and Kuwait (Horizontal and Directional Technology, Drilling Technology, Water Injection Technology, Advanced Reservoir Engineering, Hole Problems, and Casing and Cementing Operations)

### **CONFERENCE ATTENDED**

23–26 April, 2018 SPE Kingdom of Saudi Arabia Annual Technical Symposium and Exhibition, Dammam, KSA

February 2012	North Africa Technology Conference and Exhibition, Cairo,
	Egypt
November 2011	Energy Dialogue, Organized by Kng Abdullah Petroleum
	Stuies and Research Center, Riyadh, KSA.
October 2010	International Energy Symposium and Riyadh International
	Petroleum, Gas and Petrochimica industries Exhibition,
	Riyadh, KSA.
June 2010	CPS/SPE International Oil & Gas Conference and Exhibition
	in China held in Beijing, China.
April 2010	Riyadh Economic Forum, Riyadh, KSA.
October 2009	SPE Annual Technical Conference and Exhibition, New
	Orleans, Louisiana, USA.
March 2009	SPE Middle East Oil & Gas Show and Conference, the Bahrain
	International Exhibition Centre, Kingdom of Bahrain.
February 2005,	The 9 <sup>th</sup> international Mining, Petroleum and Metallurgical
	of Engineering Conference, Cairo University, Egypt
April 2002	The third annul research conference, UAE University,
	Al-Ain, UAE
April 1999	4 <sup>th</sup> Computer Conference, SPE Egypt Section, Cairo,
	Egypt
February 1999,	The 6 <sup>th</sup> international Mining, Petroleum and Metallurgical
	of Engineering Conference, Cairo University, Egypt

### HONORS AND AWARDS

- Faculty of Engineering, Cairo University Medal in the Alumni Ceremony for 1995 graduates.
- Faculty of Engineering, Cairo University Medal in the Alumni Ceremony for 2000 graduates.
- The Center of the Advancement of Post-Graduate Studies and Research in Engineering Sciences- Cairo University - the distinguished prize of post-graduate studies-2006
- Faculty of Engineering, Cairo University Medal in the Alumni Ceremony for 2005 graduates.

### **PUBLICATION**

- Khaled A/El. Fattah, S. El-Tayeb, A. A. Dahab, & F. Khalaf, "3-D Well Design Using Computer Optimization Model" 4<sup>th</sup> Computer Conference, SPE Egypt Section, Cairo, Egypt, April 1999.
- 2. Khaled A/El. Fattah, "A 3-D Optimization Model For Planning Horizontal Wells" M.Sc. Thesis, Cairo University, Egypt, January 2000.
- 3. R.A. Almehaideb, I. Ashour, K.A. El-Fattah, "Improved K-value Correlation for UAE Crude Oil Components at High (in Reservoir) and low

(in surface) Pressures Using PVT Laboratory Data" the third annul research conference, UAE university, Al-Ain, UAE, April 2002.

- 4. R.A. Almehaideb, I. Ashour, K.A. El-Fattah, "Improved K-value Correlation for UAE Crude Oil Components at High Pressures Using PVT Laboratory Data" SPE 78581-MS, Abu Dhabi International Petroleum Exhibition and Conference, Abu Dhabi, United Arab Emirates 13-16 October 2002.
- 5. Khaled A/El. Fattah, "Volatile Oil and Gas Condensate Fluid Behavior for Material Balance Calculations and Reservoir Simulation" Ph. D. Thesis, Cairo University, Egypt, November 2005.
- Khaled A/El Fattah, Ahmed H. El-Banbi, and M. H. Sayyouh " New Modified Black Oil PVT Correlations for Gas Condensate and Volatile Oil Fluids", SPE 102240-MS, SPE Fall Meeting Conference, San Antonio, Texas, U.S.A, September 2006.
- Ramez Azmy, Ahmed M. Daoud, Khaled A. Fattah, and M.H. Sayyouh, "Fast and Efficient Sensitivity Calculation Using Adjoint Method for 3 Phase Field-Scale History Matching" SPE 120433-MS, SPE Middle East Oil & Gas Show and Conference, the Bahrain International Exhibition Centre, Kingdom of Bahrain, March 2009.
- 8. Mohamed A. Elias, Khaled A/El Fattah, Ahmed H. El-Banbi, S. El-Tayeb "New Inflow Performance Relationship for Solution-Gas Drive Oil Reservoirs" SPE-124041-MS, SPE Annual Technical Conference and Exhibition, New Orleans, Louisiana, USA, 4-7 October 2009.
- K. A. Fattah, S. M. EL-KATATNEY, A. A. Dahab, "Potential Implementation of Underbalanced Drilling Technique in Egyptian Oil Fields" SPE 130711-MS, CPS/SPE International Oil & Gas Conference and Exhibition in China held in Beijing, China, 8–10 June 2010.
- K. A. Fattah, Seydou Sinde, A. A. Dahab, 'Potential Implementation of Casing While Drilling Technique in The Western Desert Fields of Egypt" SPE-149835-PP, North Africa Technology Conference and Exhibition, scheduled 20-22 February 2012 in Cairo, Egypt.
- 11. Musaed N. J. AlAwad, K. A. Fattah, Ahmed A. AlGobany: "Wellbore Fractures Sealing: Innovative Experimental Setup and Superb Seal Material", SPE Kingdom of Saudi Arabia Annual Technical Symposium and Exhibition held in Dammam, KSA, 23–26 April, 2018.
- 12. Musaed N. J. AlAwad, K. A. Fattah, and A. A. AlGobany: "Innovative Wellbore Strengthening Using Crushed Date Palm Seeds and Shredded Waste Car Tyres" The 10th ISRM International Asian Rock Mechanics Symposium, Oct. 29 to Nov. 03, 2018, Singapore.
- 13. Amao, Abiodun Matthew, Alquraishi, Abdulrahman, Alghamdi, Faisal, Aref, Lashin, Elshreef, Khaled, and Abdulaziz Laboun. "Petrophysical Characterization of the Qusaiba Formation, Tabuk Basin, North West Saudi Arabia: Implications for Reservoir Dynamics in a Shale Play." Paper presented at the International Petroleum Technology Conference, Riyadh, Saudi Arabia, February 2022.

https://doi.org/10.2523/IPTC-22184-MS

14. Al Awad, M.N.J., Fattah, K.A., "Superior Fracture-Seal Material Using Crushed Date Palm Seeds for oil and Gas Well Drilling Operations" 3rd World Conference on Byproducts of Palms & their Applications (ByPalma), 05 – 08 December, 2023 Riyadh Front Exhibitions and Conferences Center, KSA

### Peer-Reviewed Publications

- R.A. Almehaideb, I. Ashour, K.A. El-Fattah, "Improved K-value Correlation for UAE Crude Oil Components at High Pressures Using PVT Laboratory Data" Fuel Volume: 82 Issue: 9 Pages: 1057-1065 DOI: 10.1016/S0016-2361(03)00004-8 Published: JUN 2003. http://dx.doi.org/10.1016/S0016-2361(03)00004-8
- Khaled A/El Fattah, Ahmed H. El-Banbi, and M. H. Sayyouh "Study Compares PVT Calculation Methods for Nonblack Oil Fluids" Oil& Gas Journal, Volume: 104 Issue: 12 Pages: 35-39 Published: MAR 27 2006.
- Khaled A/El Fattah, Ahmed H. El-Banbi, and M. H. Sayyouh " New correlations calculate volatile oil, gas condensate PVT properties" Oil& Gas Journal, Volume: 107 Issue: 20 Pages: 41-46 Published: MAY 25 2009.
- K. A. Fattah, S. M. EL-KATATNEY, A. A. Dahab, "Potential Implementation of Underbalanced Drilling Technique in Egyptian Oil Fields" Journal of King Saud University – Engineering Sciences, volume 23, Issue 1, Pg 49–66, Elsevier, January 2011. http://dx.doi.org/10.1016/j.jksues.2010.02.001
- 5. Ramez Azmy, Ahmed M. Daoud, Khaled A. Fattah, and M.H. Sayyouh, "Fast and Efficient Sensitivity Calculation Using Adjoint Method for three-Phase Field-Scale History Matching" Journal of Petroleum Science and Engineering, volume 77, Pg 338–350, Elsevier, June 2011. http://dx.doi.org/10.1016/j.petrol.2011.04.009
- K. A. Fattah, "K-Value Program for Crude Oil Components at High Pressures Based on PVT Laboratory Data and Genetic Programming" Journal of King Saud University – Engineering Sciences, Elsevier, 2011, doi:10.1016/j.jksues.2011.06.002.
  - http://dx.doi.org/10.1016/j.jksues.2011.06.002
- K. A. Fattah, "A New Approach Calculate Oil-Gas Ratio for Gas Condensate and Volatile Oil Reservoirs Using Genetic Programming" Electronic scientific journal "Oil and Gas Business", 2012, № 1(Jan-Feb.) issue, Mar. 2012, Russia.

http://www.ogbus.ru/eng/authors/Fattah/Fattah 2.pdf

8. K.A. Fattah, Mohamed Elias, H. Ahmed El-Banbi, El-Sayed A. El-Tayeb, "New Inflow Performance Relationship for Solution-Gas Drive Oil Reservoirs" Electronic scientific journal "Oil and Gas Business", 2012, № 5 issue, Oct. 2012, Russia.

http://www.ogbus.ru/eng/authors/Fattah/Fattah 3.pdf

 Blkoor SO, Fattah KA, The Influence of XC-Polymer on Drilling Fluid Filter Cake Properties and Formation Damage, J Pet Environ Biotechnol 4: 157, (2013).

doi:10.4172/2157-7463.1000157

- 10.K. A. Fattah, "Gas-oil ratio correlation (RS) for gas condensate using genetic programming" Journal of Petroleum Exploration and Production Technology, Jan. 2014, Springer Berlin Heidelberg <u>https://doi.org/10.1007/s13202-014-0098-x</u>
- 11. K.A. Fattah, Mohamed Elias, H. Ahmed El-Banbi, El-Sayed A. El-Tayeb, "New Inflow Performance Relationship for Solution-Gas Drive Oil Reservoirs" Journal of Petroleum Science and Engineering, volume 122, October 2014, Pages 280–289, Elsevier. https://doi.org/10.1016/j.petrol.2014.07.021
- 12. K.A. Fattah, A. Lashin, "Investigation of mud density and weighting materials effect on drilling fluid filter cake properties and formation damage" Journal of African Earth Sciences, volume 117, May 2016, page 345-357, Elsevier.

https://doi.org/10.1016/j.jafrearsci.2016.02.003

13. Fattah, K.A., Lashin, A. "Improved oil formation volume factor (Bo) correlation for volatile oil reservoirs: An integrated non-linear regression and genetic programming approach" Journal of King Saud University – Engineering Sciences (2016), Elsevier.

http://dx.doi.org/10.1016/j.jksues.2016.05.002

- 14. Al Awad, M.N.J., Fattah, K.A., "Superior Fracture-Seal Material Using Crushed Date Palm Seeds for oil and Gas Well Drilling Operations" Journal of King Saud University - Engineering Sciences (2017), Elsevier. <u>http://dx.doi.org/10.1016/j.jksues.2017.01.003</u>
- 15. Mohamed Khamis, Ebrahim Bin Marta, Ali Al Natifi, Khaled Abdel Fattah, Aref Lashin, Simulation of the mulltizones clastic reservoir: A case study of Upper Qishn Clastic Member, Masila Basin–Yemen, Journal of African Earth Sciences, volume 130, 2017, page 252-268, Elsevier.

http://doi.org/10.1016/j.jafrearsci.2017.03.018

16. Al Awad, M.N.J., Fattah, K.A., "Utilization of shredded waste car tyres as a fracture seal material (FSM) in oil and gas drilling operations" Journal of Petroleum and Gas Engineering Vol. 8 (3), pp. 21-28, May, 2017.

http://10.5897/JPGE2017.0267

17. Mohammed A. Khamis, K. A. Fattah., "Estimating oil–gas ratio for volatile oil and gas condensate reservoirs: artificial neural network, support vector machines and functional network approach" Journal of Petroleum Exploration and Production Technology, June 2018, Springer Berlin Heidelberg

### https://doi.org/10.1007/s13202-018-0501-0

- 18. Faisal AlGhamdi, Abdulrahman AlQuraishi, Abiodun Amao, Abdulaziz Bin Laboun, Khalid Abdel Fattah, Ali Kahal, Aref Lashin, Depositional setting, mineralogical and diagenetic implication on petrophysical properties of unconventional gas reservoir of the silurian qusaiba formation, northwestern arabian peninsula, Geoenergy Science and Engineering, Volume 223, 2023, 211563, ISSN 2949-8910, https://doi.org/10.1016/j.geoen.2023.211563.
- 19. Lashin, Aref, Mohamed Hail Hakimi, Faisal AlGhamdi, Abiodun Matthew Amao, Abdulrahman AlQuraishi, Khalid Abdel Fattah, and Abdulaziz Bin Laboun. 2023. "Elemental Geochemistry and Biomarker Measurements of the Silurian Shale of Qusaiba Formation, Tayma Area, Northwestern Saudi Arabia: Implication for Organic Matter Input and Paleoenvironmental Conditions" Minerals 13, no. 4: 468. <u>https://doi.org/10.3390/min13040468</u>

### <u>Books</u>

1. Khaled Ahmed, "Volatile Oil and Gas Condensate Reservoir Fluid Behavior for Material Balance Calculations and Reservoir Simulation "VDM Verlag Dr. Müller Aktiengesellschaft & Co. KG, Germany, 2010.