

## CURRICULUM VITAE Ghareb Mostafa Hamada

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## **PERSONAL INFORMATION**

| Name          | Ghareb Mostafa Hamada         |
|---------------|-------------------------------|
| Date of Birth | 8 <sup>th</sup> November 1952 |
| Nationality   | Egyptian                      |
| E-mail        | ghareb.hamada@aast.edu &      |
|               | gharebhamada369@gmail.com     |
| Tel No.       | Mobile: +201094153499         |
| Skype ID      | Ghareb Hamada                 |

## SCIENTIFIC BACKGROUND

| 1983 | Docteur D'Ingénieur (Doc. D'Ing)                      | Faculty of Sciences         |
|------|---|-----------------------------|
|      | Applied Geophysics                                    | Bordeaux University, France |
| 1981 | Diplôme D'Étude Approfondie (DEA) Faculty of Sciences |                             |
|      | Applied Geophysics                                    | Bordeaux University, France |
| 1979 | M.S., Petroleum Engineering                           | Faculty of Engineering      |
|      | Well Logging  | Cairo University, Egypt     |
| 1975 | B.S., Petroleum Engineering                           | Faculty of Engineering      |
|      |   | Cairo University, Egypt     |

## **RESEARCH SCHOLARSHIPS**

- 1- June-Sept. 1978, DAAD Scholarship for "Training on laboratory measurements of reservoir rock petrophysical properties", Clausthal University, Germany
- 2- Sept. 1979–June 1983, French Scholarship for "DEA & Doc. D'Ing degrees in the field of Applied Geophysics: Doc D'Ing thesis title "Seismic wave velocity and attenuation as diagnostic parameters of marine sediments", Bordeaux University, France
- 3- June 1983–June 1984 Research Assistant Scholarship, Laboratory of Applied Geophysics, Faculty of Sciences, Bordeaux University, France.
- 4 Oct. 1996–March 1997, Danish Scholarship for "Analysis of petrophysical properties of green sand", Technical University of Denmark, Copenhagen, Denmark

## **EMPLYMENT HISTORY**

| Jan.2024-Now    | Professor, Oil and Gas Engineering Department, College of<br>Engineering & Technology, Arab Academy for Science,<br>Technology & Maritime Transport (AASTMT) Alexandria |
|-----------------|---|
|                 | Egynt   |
| Aug.2021-2023   | Professor, Petroleum Engineering Department, College of   |
| G ( 2020 A      | Engineering, The American University of Kurdistan, Duhok, Iraq  |
| Sept. 2020-Augu | ist 2021 Acting Dean, College of Engineering, The American University   |
| Max 2010 Sant   | 01 Kuruisian, Dunok, Iraq<br>2020 Professor/Chair, Potroloum Engineering Department, College of   |
| May-2019- Sept. | Engineering The American University of Kurdistan Dubok Irag   |
| 2016 2010       | Associate Professor, Petroleum Engineering Department, Faculty of   |
| 2010-2019       | Geosciences and Petroleum Engineering Universiti Teknologi  |
|                 | Petronas Malaysia   |
| 2015-2106       | Professor Petroleum Engineering Department Faculty of Engineering   |
| 2013 2100       | Future University in Forut New Cairo Cairo Forut  |
| 2011-2015       | Visiting Professor, Chemical and Petroleum Engineering Department.  |
| 2011 2012       | Faculty of Engineering. UAE University. United Arab Emirates.   |
| 2010 - 2011     | Professor. Petroleum Engineering and Gas Technology Department  |
|                 | Faculty of Engineering. The British University in Egypt, ElSherouk, Egypt.  |
| 2009 - 2010     | Professor and Head of Petroleum Engineering and Gas Technology  |
|                 | Department, Faculty of Engineering, The British University in Egypt.  |
|                 | ElSherouk, Egypt.   |
| 2006 - 2009     | Visiting Professor, Petroleum Engineering Department, Faculty of  |
|                 | Engineering, King Fahd University of Petroleum & Minerals, Saudi Arabia.  |
| 2003 - 2006     | Professor, Petroleum Engineering Department, Faculty of Engineering,  |
|                 | Cairo University, Egypt.  |
| 1997 - 2003     | Professor, Petroleum Engineering Department, Faculty of Engineering,  |
|                 | King Saud University, Saudi Arabia.   |
| 1996 - 1997     | Researcher, Technical University of Copenhagen, Copenhagen, Denmark   |
| 1993 - 1996     | Assistant Professor, Petroleum Engineering Department, Faculty of   |
|                 | Engineering, Cairo University, Egypt.   |
| 1989 - 1993     | Assistant Professor, Petroleum Engineering Department, College of   |
|                 | Engineering, Sultan Qaboos University, Sultanate of Oman.   |
| 1984 - 1989     | Lecturer, Petroleum Engineering Department, Faculty of Engineering,   |
| 1000 1001       | Cairo University, Egypt.  |
| 1983 - 1984     | Researcher, Laboratory of Applied Geophysics, Faculty of Science,   |
| 1000 1000       | Bordeaux University, France.  |
| 1980 - 1983     | Doc. D'ing. Student, Faculty of Sciences, Bordeaux University, France.  |
| 1979 - 1980     | DEA Degree Student, Faculty of Sciences, Bordeaux University, France.   |
| 19/8 - 19/9     | Assistant Lecturer, Petroleum Engineering Department, Faculty of  |
| 1075 1079       | Engineering, Cairo University, Egypt.   |
| 17/3 - 19/8     | Engineering Coiro University Egypt  |
|                 | Engineering, Cano University, Egypt.  |

### ACADEMIC EXPERIENCES

#### I- UNIVERSITY TEACHING COURSES

## 1- College of Engineering & Technology, AASTMT, Alexandria (2024- Now)

• Introduction to Petroleum Engineering

#### 2- Faculty of Engineering, AUK, Kurdistan (2019- 2023)

#### **Graduate Level**

- Formation Evaluation
- Production Logging
- Petroleum Exploration Engineering
- Processes in Petroleum Production
- Petroleum Production Systems
- Fundamentals of Reservoir Engineering
- Natural Gas Engineering
- Statistical Applications for Petroleum Engineers
- Petroleum Economics and Legislation
- Introduction to Petroleum Engineering

#### **3-** Faculty of Geosciences & Petroleum Engineering, UTP Malaysia (2016- 2019) Graduate Level

- Well Logging & Formation Evaluation
- Well Production Optimization
- Gas Field Engineering
- Fundamental of Petroleum Exploration Engineering

#### **Postgraduate Level**

- Formation Evaluation
- Petroleum Geoscience

#### 4- Faculty of Engineering, Future University in Egypt, FUE (Sept. 2015– Sept. 2016) Graduate Level

- Well Performance and Production Systems
- Petroleum Geology
- Well Logging
- Reservoir Characterization
- Reservoir Engineering

#### 5- Faculty of Engineering, UAE University, UAE (Feb. 2011-June 2015) Graduate Level

- Well Logging
- Petroleum Production Operations
- Petroleum Property Evaluation
- Data Analysis in Petroleum Engineering

- Reservoir Mechanics
- Natural Gas Engineering
- Applied Reservoir Geology

#### Postgraduate Level

- Well Stimulation
- Production Logging
- Fluid Flow in Porous Media
- Crude Oil Characterization
- Advanced Reservoir Geology
- Advanced Reservoir Characterization

#### 6- Faculty of Engineering, BUE, Egypt (July, 2009 – 2010)

- Well Logging
- Petroleum Exploration Engineering
- Petroleum Production Engineering

#### 7 - Faculty of Engineering, KFUPM, Saudi Arabia (Feb., 2006 – 2009) Graduate Level

- Well Logging
- Production Logging
- Subsurface Production Engineering

#### Postgraduate Level

- Advanced Well Logging
- Coring and Core Data Analysis

#### 8- Faculty of Engineering, Cairo University, Egypt (Sept., 2003 – Feb. 2006) Graduate Level

- Well logging Analysis
- Production Logging
- Petroleum Exploration Engineering
- Petroleum Geology

#### **Postgraduate Level**

- Subsurface Geology
- Formation Evaluation

#### 9- Faculty of Engineering, King Saud University, Saudi Arabia (Sept. 1997- Sept. 2002) Graduate Level

- Well Logging,
- Petroleum Exploration Engineering
- Enhanced Oil Recovery
- Oil & Gas Transportation

#### Postgraduate Level

• Advanced Reservoir Fluids Properties

# 10- Technical University of Denmark, Copenhagen, Denmark (Oct. 1996-March 1997)Graduate Level

• Formation Evaluation

11- Faculty of Engineering, Cairo University, Egypt(June1984 - Sept.1989 & Sept.1993- June 1996)

#### **Graduate Level**

- Well Logging
- Applied Geophysics
- Petroleum Geology
- Petroleum Production

#### Postgraduate Level

- Computer Application in Petroleum Exploration
- Formation Evaluation
- Engineering Seismology & Seismic Hazard

#### 12- Faculty of Engineering, Sultan Qaboos University, Oman (Sept. 1989-June1993)Graduate Level

- Well Logging
- Petroleum Exploration Engineering
- Enhanced Oil Recovery
- Drilling Fluids Rheology Properties

#### 13- Faculty of Sciences, Cairo University, Egypt (Sept.1986-June1988)Graduate Level

- Seismic Data Processing
- Seismic Data Interpretation

#### **<u>II-THESES SUPERVISION</u>**

#### A- Cairo University, Egypt

- 1- MS thesis "Analysis of seismic wave velocity and attenuation parameters in Zeit Pay Field, Gulf of Suez", Faculty of Sciences, Cairo University, Egypt, 1988.
- 2- MS thesis "Study of geo-electrical properties and frequency parameters of near surface layers in Gurf Hussain area, Aswan region", Faculty of Sciences, Cairo University, Egypt, 1990.
- 3- PhD thesis "Determination of lithofacies properties and fluid nature using core data and well logging records of Nubian sandstone formation, Ras Budran oil field", Faculty of Engineering, Cairo University, Egypt, 1994.
- 4 MS thesis "Gas saturation monitoring using pulsed neutron in Zeit Pay field, Gulf of Suez", Faculty of Engineering, Cairo University, Egypt, 1996.
- 5- MS thesis "Estimation of hydrocarbon saturation in shaly formation", Faculty of Engineering, Cairo University, Egypt, 1999
- 6- MS thesis " Gas production optimization in Badr ElDin -2 field in the Western Desert", Faculty of Engineering, Cairo University, Egypt, 2004
- 7- PhD thesis "Evaluation of tight gas sand reservoirs, Western Desert using NMR", Faculty of Engineering, Cairo University, Egypt, 2006.

- 8- MS thesis "Evaluation of hydrocarbon potential of gas reservoirs sing TDT and CHFR Logs", Faculty of Engineering, Cairo University, Egypt, 2006.
- 9- MS thesis" Comparative study of different shaly sand models with application in Egyptian oil field" Faculty of Engineering, Cairo University, Egypt, 2007.

### **B- King Saud University, Saudi Arabia**

1- MS. thesis "Evaluation of petrophysical properties of shaly sands", College of Engineering King Saud University, 2002.

## C- King Fahd University of Petroleum & Minerals, Saudi Arabia

- 1- MS thesis "Pressure gradient surveys as cost effective diagnostic technique in gas Producing wells" College of Engineering Sciences, King Fahd University of Petroleum & Minerals, Saudi Arabia, 2007
- 2- PhD thesis "Use of T2 NMR measurement to study transport processes between micro and macro pore systems in carbonate rocks" College of Engineering, King Fahd University of Petroleum & Minerals, Saudi Arabia, 2007.
- 3- MS thesis "Analysis of Archie's parameters determination techniques", College of Engineering Sciences, King Fahd University of Petroleum & Minerals, Saudi Arabia, 2007.

- 4- MS thesis "Artificial Intelligence techniques in reservoir characterization" College of Computer Sciences and Engineering, King Fahd University of Petroleum & Minerals, Saudi Arabia, 2008
- 5- MS thesis "Simulation of influential miscibility parameters of miscible CO2-crude system" College of Engineering Sciences, King Fahd University of Petroleum & Minerals, Saudi Arabia, 2009
- 6- MS thesis "LWD porosity predication for well placement using Neural Network" College of Engineering, King Fahd University of Petroleum & Minerals, Saudi Arabia, 2009

## D- Universiti Teknologi PETRONAS, Malaysia

- 1- MS thesis: "Comparative study of estimating water saturation in shale gas using different models", Faculty of Geoscience and Petroleum Engineering, UTP, 2018.
- 2- MS thesis "Impact of pore fabrics on the performance of foam flooding performance in sandstone reservoirs" Faculty of Geosciences and Petroleum Engineering, UTP, Malaysia, 2018
- 3- MS thesis "Factors affecting the ultrasonic wave propagation and its impact on water flooding performance" Faculty of Geosciences and Petroleum Engineering, UTP, Malaysia, 2018
- 4 MS thesis "Adsorption of methane and carbon dioxide and their mixture on shale in the presence of water" Faculty of Geosciences and Petroleum Engineering, UTP, Malaysia, on going
- 5- PhD thesis "Carbon Dioxide Capturing and Flooding Its Injection Wells Integrity and Environmental Impact Assessment "Faculty of Geosciences and Petroleum Engineering, UTP, Malaysia, on going
- 6- PhD thesis "Constructing Capillary Pressure Curves from Well Logs Constructing Capillary Pressure Curves from Well Logs" Faculty of Geosciences and Petroleum Engineering, UTP, Malaysia, on going
- 7- PhD thesis "A core flood Investigation of Water Based Nanoparticles for Enhanced Oil Recovery" Faculty of Geosciences and Petroleum Engineering, UTP, Malaysia, on going
- 8- PhD thesis "Shale Gas Fraction Production" Faculty of Geosciences and Petroleum Engineering, UTP, Malaysia, on going
- 9- PhD thesis "Core flood Investigation of Nanoparticle application to residual oil recovery" Faculty of Geosciences and Petroleum Engineering, UTP, Malaysia, on going

## **III-RESEARCH PROJECTS**

- 1- Analysis of Seismic Energy Absorption Due To Salt Sections in Gulf of Suez and its Effect on Recorded Seismic Data Interpretation. This project was funded and supervised by Suez Oil Company "SUCO", 1987-1988, Egypt (Principal Investigator).
- 2- Formation Evaluation of Egyptian oil Fields & Screening Criteria for horizontal drilling activities potential in Egypt. This project was carried out in cooperation with Egyptian General Petroleum Corporation "EGPC", 1994–1995, Egypt (Principal Investigator).
- 1- Study of Petrophysical Properties and Reservoir Performance of Shaly Sands Formations in Salam Field, Western Desert. This project was funded and supervised by Khalda Oil Company, 1995 –1996, Egypt (Principal Investigator)
- 2- Petrophysical Evaluation of Low Resistivity Green Sands, North Sea Region. This Project was funded by Technical University of Denmark and Maersk Oil Company, September 1996 March 1997, Denmark (Principal Investigator).

- 3- Developing new slurry to prevent sand production from unconsolidated sandstone oil and gas reservoirs. This project was funded by SABIC and Research Center, College of Engineering, King Saud University, 1998 – 2000, Saudi Arabia (Co- Investigator).
- 4- Electrical parameters and capillary pressure measurements and analysis. This project with Research Institute, KFUPM, 2007-2009 Saudi Arabia, (Principal Investigator)
- 5- Permeability modeling for HRDH/Kuff using fuzzy logic approach. This project is in cooperation with Research Institute, KFUPM, 2007, Saudi Arabia (Co- Investigator)
- 6- Using neural networks to estimate petrophysical properties of sandstone reservoirs from NMR measurements. KFUPM project, 2007, Saudi Arabia (Principal Investigator).
- 7- Multimodal storage mechanism of natural gas analysis of adsorbed, free and dissolved gas fractions in shale gas reservoirs, UTP project, 2016, Malaysia (Co-Investigator)
- 8- Characterization of Some Sarawak Black Shales with the Emphasis on Spectral Gamma Ray Response in outcrops. UTP project, 2017, Malaysia (Co-Investigator)
- 9- A Core flood Investigation of Water Based Nanoparticles for Enhanced Oil Recovery, UTP project, 2017, Malaysia (Principal Investigator)
- 10- Developing a New Mathematical Model to Study Diffusion Mechanism during Carbonated Water Injection as an EOR and CO2 Sequestration Technique, UTP project, 2017, Malaysia (Co-Investigator)
- 11- Green House Gas CO2 Sequestration in Basalt Rocks in Malaysia, UTP project, 2017, Malaysia (Co-Investigator)
- 12- Enhancing shale gas production using hydraulic fracture UTP project, 2017, Malaysia (Principal investigator)
- 13- 3D Total porosity modeling using FESEM and TEM in unconventional tight sandstone and shale gas reservoir. UTP project, 2017, Malaysia (Co-Investigator)
- 14- Using Neural networks to estimate petrophysical properties of sandstone reservoirs from NMR measurements. UTP project, 2017, Malaysia (Principal investigator)

## **IV-** ACADEMIC SERVICES

## 1- AUK, Kurdistan, Iraq

- Acting Dean, College of Engineering
- Department of Petroleum Engineering, Chair

## 2- UTP, Malaysia

- Organizing committee of International Oil Gas Petroleum Conference, UTP, Malaysia
- Organizing committee of International Workshop on Unconventional Modelling, Simulation and Optimization for GEO science (UMSO-GEO2017)

## 3- UAE University, United Arab Emirates

- SPE Student Chapter Advisor
- SPE Abu Dhabi section board member

## 4- British University in Egypt (BUE), Egypt

- Head of Petroleum Engineering & Gas Technology Department (2009-2010)
- SPE Student Chapter Advisor (2009- 2011)
- SPE Egypt section board member
- SPE Regional Middle East Scholarship Selection Committee (2010-2011)

#### 5- King Fahd University for Petroleum & Minerals, KFUPM, Saudi Arabia

- SPE Student Chapter Advisor (2006- 2009)
- Department Seminar Coordinator (2007-2009)

#### 6- Cairo University, Egypt

- SPE Student Chapter Advisor (2002 2004)
- Department Seminar Coordinator

#### 7- King Saud University, Saudi Arabia

- Member in The Academic Affairs Committee
- Student Registration Supervisor
- SPE Student Chapter Founder

#### 7- Cairo University, Egypt

- SPE Student Chapter Advisor (1995-1997)
- Department Seminar Coordinator

## **INDUSTRY EXPERIENCES**

## I- OIL & GAS INDUSTRY SRVICES

## 1- Suez Oil Company (SUCO), 1987 –1988

**Job Description:** SUCO works in the Gulf of Suez where there is a salt problem. Salt sections absorb seismic energy thereupon it becomes difficult to interpret seismic sections at reservoir depths. The main goal of the job was to find a seismic data processing technique to compensate this energy absorption problem to easily see the reflectors and do interpretation

## 2- Egyptian General Petroleum Corporation (EGPC), 1994-1997

*Job Description:* The main goal of this job to check the reserve estimate and reservoir performance of all Egyptian oil fields. Also, carrying out analysis of the contribution degree of using horizontal drilling technology in the development of the Egyptian oil fields.

## 3- Khalda Oil Company, 1996 – 1997

**Job Description:** Khalda works in the western desert area. Reservoir rocks of Khalda fields in Western Desert are mainly dirty sand or low resistivity sandstone reservoirs. The goal of this job was to how to evaluate theses reservoirs and how to make early prediction of well production performance before well testing.

## 4- Badr Petroleum Company "Bapetco", June, 2003 – January 2004

**Job Description**: Bapetco produces oil and gas from carbonate, sand and shaly sand reservoirs in Western Desert, Egypt. The goal of this job is to do formation evaluation and to prepare reservoir characterization using data from well logs, well tests, fluid samples and production history as input parameters for static and dynamic models for these reservoirs.

## 5- Associate Vice President (AVP), Nature Science Research International Center (NSRIC), Canada, February, 2021- Now

**Job Description**: NSRIC, Canada is a research institution for skilled education, HRD and RID. The main task of my position is to manage the teaching and research activities of college of Engineering as Dean of Engineering with main objective of sharing and spreading engineering knowledge by bringing the engineering experts together for engineering science development and helping community.

## **II- SELECTED TRAINING SHORT COURSES AND SEMINARS**

- 1- Five days short course for petroleum engineers on" Petroleum Geology for Petroleum Engineers": Organized by the Egyptian Society of Engineers, January 1988, Cairo, Egypt.
- 2- One day seminar on" Geo-Electrical Surveying for Ground water": Organized by MIT, September, 1988, Cairo, Egypt
- 3- Two days short course on" Production Logging Interpretation": Organized by the
- 4- Egyptian Society of Engineers", June, 1989, Cairo, Egypt
- 5- Five days short course on "Well Logging Interpretation Techniques": Organized by the Egyptian Society of Engineers, April 1994. Cairo Egypt
- 6- Five days short course on "Applied Open Hole Log Interpretation": Organized by IHRDC, October, 1994, Damascus, Syria
- 7- One day seminar on "Application of Radioactivity in Petroleum Engineering": Organized by the Egyptian Society of Nuclear Engineering, October, 1995, Alexandria, Egypt
- 8- Three days short course on" Advance Core Analysis- NMR", Organized by The Egyptian German Academy, Cairo, January., 2004
- 9- Five days training course on" Well logging Interpretation", Organized by EGYCAN, Cairo, February, 2004.
- 10- Three days short course on "Seismic Data Interpretation" Organized by EGYCAN, Cairo, March, 2004.
- 11- Five days short course on "Basic Open Hole Logging Interpretation" Organized by ETC, Cairo, September, 2004.
- 12- Ten days short course on "Formation Evaluation" Organized by GCC, Cairo, January, 2005.
- 13- Five days short course on "Formation Evaluation", Organized by KFUPM, Dhahran, Saudi Arabia, December, 2006
- 14- One day short course on "Basic Petroleum Engineering" Organized by SPEKSA, Dhahran, Saudi Arabia, 2007

## LIST OF PUBLICATIONS

Google Scholar:

https://scholar.google.com/citations?user=rKaaJHkAAAAJ&hl=enttps://scholar.google.com/citations?hl=en Research gate: https://www.researchgate.net/profile/Ghareb-Hamada-3\_

#### **A- Research INTERESTS**

- 1. Formation Evaluation/ Petrophysics
- 2. Production Logging
- 3. Reservoir Evaluation of Unconventional Reservoirs
- 4. Artificial Intelligence Applications in Formation Evaluation/Petrophysics

## **B- PAPERS PUBLISHED IN PEER-REVIEWED JOURNALS**

- 1. 1. Hamada, G.M., AlGathe, A. A. and Al-Khudefi, 2023, New Insights on Water Saturation Determination of Carbonate Reservoirs Using Artificial Intelligence Approach (AIA) and Conventional methods, Journal of Petroleum and Mining Engineering, Vol 25(1), p. 57-63.
- Alatefy S. Abdel Azim R., Alkouh A. and Hamada G., 2023, Integration of Multiple Bayesian Optimized Machine Learning Techniques and Conventional Well Logs for Accurate Prediction of Porosity in Carbonate Reservoirs, Processes 2023, 11, 1339. https://doi.org/10.3390/pr11051339
- Hamada, G.M. and Abushanab, M., 2023, Neural Network Prediction of Porosity and Permeability of Shaly Gas Sandstone Reservoir Using NMR Data, International Journal of Petroleum and Geoscience Engineering, JPGE 2023, 15 pages - Article ID: IJPGE-2212052112830.
- 4. Hamada, G.M. and Alshamsi, M., 2023, Developed correlation of Gas compressibility of High Impurities Natural Gas Reservoirs, UAE Case Study, International Journal of Petroleum and Geoscience Engineering, IJPGE, Vol. (2023), Article ID: IJPGE-2212052112831, 15 pages.
- 5. Reda Abdel Azim and Ghareb Hamada, 2022, Novel Correlation for Calculating Water Saturation in Shaly Sandstone Reservoirs Using Artificial Intelligence: Case Study Egyptian Oil Field, ACS Omega, ACS Publications.
- 6. Hamada, G.M., AlGathe, A. A. and Al-Khudefi, A.M., 2022, Parallel Self Organizing Neural Network Estimation (PSONN) of Water Saturation Using Archie's Formula in Sandstone Reservoirs, International Journal of Petroleum and Geoscience Engineering, IJPGE Vol. 2022
- 7. Hamada, G.M. 2021, Sandstone Reservoirs Porosity and Water Saturation Estimation Using Functional Network Techniques, J Geol Geophys, Vol.10 Iss.2 No:494.
- 8. Hamada, G.M., Chaw, N. Elsakka, A., 2020, Prediction of Porosity and Water Saturation Using Neural Networks in Shaly Sand Reservoirs, Western Deseret, Egypt, Journal of Petroleum and Mining Engineering 22(2), pp. 80-91

- 9. Hamada, G.M. and Joseph, V., 2020, Developed correlations between sound wave velocity and porosity, permeability and mechanical properties of sandstone core samples, Petroleum Research, vol.5(4), pp. 326-338.
- 10. Hamada, G.M., El Mahdy, O.A. and Chandran, M, 2019, Cased hole formation resistivity contribution in water management and production enhancement of mature reservoirs, Int. J. Petroleum Engineering, Vol. 3, No. 3, pp 194-208.
- 11. Hamada, G.M. and Sundeep, R.S.2018, Mineralogical description and pore size distribution characterization of shale gas core samples, Malaysia, American Journal of Engineering Research, vol. 7, issue 7, pp. 1-10.
- El-Sakka, A., Hamada, G.M., Padmanabhan, E. and Salim, A. M., 2018, South East Asia Contains Abundant, Untapped Unconventional Reservoirs, Oil & Gas Jr., vol. 116, Issue2., p. 34-44.

13. Al-Shami, T.M., Shiferaw, R.J. and Hamada, G.M., 2018, Effect of Seismic Excitation on mobilization of Trapped Oil Globule in Pore Double Model, International Journal of Mechanical Engineering and Robotics Research (IJMERR; ISSN:2278-0149).

14. Mohamed, A.M., Hamada, G.M., 2017, Determination Techniques of Archie's parameters a, m and n in heterogeneous reservoirs, Journal of Geophysics and Engineering, vol. 14(6), pp. 1358-1367.

15. Hamada, G.M., 2017, TDT and CHFR logs monitoring of water production and bypassed oil layers and water production management in matured sandstone reservoirs, American Journal of Engineering Research, vol. 6(6), pp. 192-203.

16. Hamada, G.M. and Al-Homadhi, E.S., 2017, Developed Correlations between Porosity, Permeability and Sound Wave Velocity at different Compaction Pressures for Sandstone Core Samples, International Journal of Advanced Engineering Research and Development, vol. 4, Issue 5.

17.Hamada, G.M., 2017, Comprehensive Evaluation and Development of Unconventional Hydrocarbon Reserves as Energy Resource, Journal of Petroleum and Environmental Biotechnology, vol.2017 (1), APEB 102, p. 1-10. <u>http://gavinpublishers.com/comprehensive-evaluation-and-development-of-unconventional-hydrocarbon-reserves-as-energy-resource/</u>.

18. Hamada, G.M., 2017, Effect of Non-hydrocarbon components on Gas Compressibility Factor Values and Correlations, Journal of Applied Biotechnology & Bioengineering Vol. 2 (4), P. 1-12.

19. Hamada, G.M., 2015 " Characterization of Hydrocarbon Movability and Type of Reservoir Fluids Using Resistivity and Sonic Logging Data in Sandstone Reservoirs, Western Desert, Egypt ", Journal of Earth Science, vol. 1, no.1, pp. 41-54.

20. ElMahdy, O.A. and Hamada, G.M., 2014" Integrated NMR and density logs for the evaluation of heterogeneous gas- bearing shaly sands" Journal of Petroleum Science and Technology, vol.32 (08), p. 958-964.

21. Hamada, G.M., AlMajed, A.A., Okasha, T.M. and AlGathe, A.A., 2013 "Uncertainty analyses of Archie's parameters determination techniques in carbonate reservoirs" Journal of Petroleum Exploration and Production Technology, vol. 3(1), p. 1-10.

22. Hamada, G.M., 2011 "Uncertainty analysis of well logging data: Acquisition and interpretation", Emirates Journal for Engineering Research, UAE, vol. 16(1), p. 71-80.

23. Hamada, G.M. and Elshafei, M.A., 2010 "Neural network prediction of porosity and permeability of heterogeneous gas sand reservoirs using NMR and conventional logs, NAFTA Jr., vol. 61(10), Zagreb, R. of Croatia.

24. Hamada, G.M., 2010," Analysis of Archie parameters determination techniques in shaly sand reservoirs" Petroleum Science and Technology Jr., vol.28 (1), p. 72-82.

25. Elshafei, M.A. and Hamada, G.M., 2009, "Neural network identification of hydrocarbon potential of shaly sand reservoirs", Petroleum Science and Technology Jr., vol.27 (1), p. 72-82.

26. Hamada, G.M., 2009 "Petrophysical properties evaluation of tight gas sand reservoirs using NMR and conventional openhole logs", The Open Renewable Energy Journal, vol.2, p. 6-18.

27. Hamada, G.M. and Abushanab, M.A., 2008 "Better porosity estimate of gas sandstone reservoirs using density and NMR logging data" Emirates Journal for Engineering Research, 13(3), p. 47-54.

28. Hamada, G.M., 2008 "Uncertainty of Archie parameters (a, m and n) and consequent change in water saturation values", NAFTA Jr., vol. 59, no. 10, p. 479-494, Zagreb, R. of Croatia.

29. Hamada, G.M., Abushanab M.A. and Oraby, M. El, 2008, "New NMR approach evaluates tight gas sand" Oil & Gas Jr., June, 02, p. 46-53.

30. Hamada, G.M., 2008, "Identification of hydrocarbon moveability and type from resistivity logs", Petroleum Science and Technology Jr., vol. 26(6), p. 638-648.

31. Hamada, G.M. and Elshafei, M.A., 2007, "Application of artificial neural network (ANN) in petrophysical evaluation of shaly sand reservoirs", NAFTA Journal, vol. 58, no. 11, p. 551-555 Zagreb, R. of Croatia.

32. Hamada, G.M. and Hegazy, A.A., 2007 " Sinai well logging compares TDT and CHFR applications", Oil & Gas, May 28<sup>th</sup>, p.48-55.

33. Hamada, G.M., 2006, "NMR porosity can better estimate tight gas sand porosity" NAFTA Journal, vol. 57, no. 11, p. 459-466, Zagreb, R. of Croatia.

34. Hamada, G.M., 2006," Quality assurance lessens core, log data uncertainties", Oil & Gas Jr., October 02, 2006, p. 41-46.

35. AbuShanab, M.A., Hamada, G.M., Oraby, M.E. and Wally, A.A., 2005 " DMR technique improve tight gas porosity estimate", Oil & Gas Jr., Dec., p. 12-16.

36. Hamada, G.M.2004 "Reservoir fluids identification using Vp/Vs ratio", Oil & Gas Science and Technology, Revue de L'IFP, vol. 59, no. 6, p. 649-654. Hamada, G.M., 2004 " Factor identifies hydrocarbon recoverability, type", oil & GasJournal, April, 26, p. 49-53.

37. Hamada, G.M., Shokir, E., El-M and Alsughayer, A.A., 2002 "Reservoir performance Problems monitoring using well logging techniques: Case studies", Emirates Jr. of Engineering Research, vol.7, no.1, p. 25-31, United Arab Emirates University, UAE.

38. Hamada, G.M. and Alawad, M.N., 2002 " Evaluation of low resistivity beds using nuclear magnetic resonance" Jr. of King Abdelaziz University, Sci. Eng. vol. 14, no.1, p. 47-61, Saudi Arabia.

39. Hamada, G.M. and Al-Awad, M.N and Al-sughayer, A.A., 2002" Water saturation Computation from laboratory Data 3-D regression: Oil & Gas Science and Technology, Revue de L'IFP, vol. 57, no. 6, p. 637-651.

40. Al-Homadhi, E.S. and Hamada, G.M., 2002" Determination of petropphysical, mechanical and acoustic properties interrelationship for simulated sands": Engineering Journal of Qatar University, Qatar, vol. 15, p. 23-37.

41. Hamada, G.M. and Al-Awad, M.N. J., 2002" Evaluation of low-resistivity beds using NMR, porosity and resistivity logs": Emirates Jr. of Engineering research, vol. 7, no.1, p. 45-50, United Arab Emirates University, UAE

42. Al-Homadhi, E.S. and Hamada, G.M, 2001" Developed correlations between petrophysical, acoustic, mechanical properties for synthetic sandstone": Journal of Engineering and Applied Science, Cairo University, vol. 48, no. 5., p. 1021-1036.

43. Hamada, G.M., Al-Blehed, M.S., Al-Awad, M.N. and Al-Saddique, M.A., 2001," Petrophysical evaluation of low resistivity sandstone reservoirs with nuclear magnetic resonance log (NMR)": Jr. of Petroleum Science & Engineering, vol. 29, no.2, p. 127-136, Elsevier, B.V., Holland.

44. Al-Saddique, M.A., Hamada, G.M. and Al-Awad, M.N., 2001" Engineering coring and core data analysis": Emirates Journal of Engineering Research, Vol. 6, No.1, p. 39-49, United Arab Emirates University, UAE.

45. Hamada, G.M., Al-Awad, M.N., Al-Blehed, M.S. and Al-Saddique, M.A., 2001" Contribution of horizontal drilling technology in the development programs of Saudi oil field": Engineering Jr. of Qatar University, vol. 14, p 45-60.

46. Al-Awad, M.N., Hamada, G.M. and Almalik, M.S., 2001 "Low - resistivity beds may produce water free": Oil and Gas Jr., Jan. 01, p. 33-39.

47. Al-Saddique, M.A., Hamada, G.M. and Al-Awad, M.N., 2000" Recent advances in coring and core analysis technology: new technique to improve reservoir evaluation": Engineering Jr. Of Qatar University, vol. 13 no.2. p. 29-52.

48. Hamada, Al-Blehed, M.S. and Al-Awad, M.N., 2000 "Determining petrophysical properties of low resistivity reservoirs using NMR": Arabian Journal for Science and Engineering, vol. 25, p. 149-160.

49. Al-Saddique, M.A., Hamada, G.M. and Al-Awad, M.N., 2000 "State of the art: Review of coring and core analysis technology": Jr. King Saud University Eng. Sci., vol. 12, p. 117-138.

50. Al-Blehed, M.S. and Hamada, G.M., 2000 "Emerged technology of horizontal drilling in Saudi oil fields in the last ten years (Arabic language)": Bassel Al-Assad Scientific Jr., Syria, vol. 8, p. 12-25.

51. Hamada, G.M. and Al-Awad, M.N., 2000 "Petrophysical evaluation of low resistivity reservoir": The Canadian Journal of Petroleum Technology, vol. 39, no.7, p.7-15.

52. Hamada, G.M., Al-Blehed, M.S., Al-Awad and Al-Saddique, 2000 "Horizontal wells find varied applications in Saudi oil fields": Oil and gas Jr., May, 8, p. 47-52.

53. Hamada, G.M., Heikel, S., Dahab, A. Abed El-Dayem, M., 1999 "Gas saturation monitoring in heterogeneous reservoir using TDT modeling technique": Eng. Jr. of Qatar University, vol. 12, p. 9-24.

54. Hamada, G.M., Al- Blehed, M.S. and Al-Awad, G.M., 1999 "NMR logs find reserves by-passed by conventional analysis": Oil & Gas Jr., Sept. 27, p. 75-79.

55. Hamada, G.M., Al-Blehed, M.S. and Al-Awad, M.N., 1999" Nuclear magnetic resonance log evaluation of low resistivity reservoirs": Jr. of Engineering and Applied Science, Cairo University, vol. 46, no.5, p. 951-970.

56. Hamada, G.M., 1999 "An integrated approach to determine shale volume and hydrocarbon potential in shaly sand": The Log Analyst Jr., vol. 40, no.3, p. 14-22.

57. Hamada, G.M. and Al-Awad, M.N., 1998" TDT monitors gas saturation in heterogeneous reservoirs": Oil & Gas Jr., May 25, p. 55-60.

58. Hamada, G.M., 1996" Characterization of lithofacies properties of reservoir rocks using combined logging data in horizontal wells: Jr. of the Egyptian society of engineers, vol. 35, and p. 9-13.

59. Hamada, G.M., 1996" Corrected logs indicates lithofacies around horizontal wells": Oil & Gas Jr., March 4, p. 56-59.

60. Hamada, G.M., 1996" Archie's parameters and their impact on hydrocarbon evaluation processes (Arabic language)": Jr. of Bassel Al-Assad for Eng. Sci., no.5, p. 57-67.

61. Hamada, G.M., 1995" Scattering and attenuation of seismic waves due to scheelite mineralization": Jr. of engineering and applied science, College of Engineering Cairo University, vol. 42, no.5, p. 995-1009.

62. Hamada, G.M., 1994" Effect of Archie's saturation exponent values on the hydrocarbon evaluation processes": The Log Analyst Jr. vol. 35, no.5, p.121.

63. Hamada, G.M, Assal, A.M. and Ali, M.A., 1994" Mineral composition and porosity determination in complex lithologies using Tri-porosity logs": Al-Azhar, Bull Sci., vol. 5, no.1, and p. 109-122.

64. Hamada, G.M. and El-Farsi, N., 1993" Determination of Archie's parameters from Omani carbonate cores": Jr. of King Saud University, Engineering Sci., vol. 6, no.2, p. 281-294.

65. Hamada, G.M., 1992" Determination of rock characteristics using combined log data for Omani oil fields- Case study": Geotomography, Intl. Pub. of SEGJ, Tokyo, Japan, vol. 2, p. 337-385.

66. Hamada, G.M., 1992," Determination of rheological properties of polymer solutions in sandpacks", Engineering Jr. of Qatar University, vol.5, pp. 23-34.

67. Osman, A.A.A. and Hamada, G.M., 1991" Acoustic properties as function of depth in the Gulf of Suez, Egypt": Jr. Petroleum Research Institute, vol.3, Tripoli, Libya, p. 27-34.

68. Refai, E., Maamoun, M., El-Defrawy, M., Attia, S. and Hamada, G.M., 1991" A Preliminary report on frequency characteristics of near surface layers in the vicinity of the High Dam Lake": Jr. of Geodynamic, vol. 14, p. 105-110.

69. Hamada, G.M., 1989" VSP: Measurement of attenuation and velocity of seismic waves in the Gulf of Suez": Jr. of The Egyptian Soc. of Engineers, vol. 29, no. 3, p. 15-24.

70. Hamada, G.M., 1988" Attenuation of P-wave in marine sediments: Science Engineering Bull. Faculty of Engineering, Cairo University, vol. 35, no.2, p. 15-22.

71. Hamada, G.M., 1987" Traitement du signal sismique par la technique anti-moyenne en sismique faible profondeur": Jr. of Egyptian Soc. of Engineers, vol. 26, no.4, p. 12-23.

72. Maamoun, M. and Hamada, G.M., 1987" An Investigation of the hydrodynamic pressure acting during earthquakes on buried pipes at different sites in the Gulf of Suez": Jr. of Egyptian Society of Engineers, vol. 26, no.1, p. 13-24.

73. Hamada, G.M., 1986" Characterstique des ondes sismiques reflechies comme une indication de la mineralisation en tengestene": Jr. of Egyptian Soc. of Engineers, vol. 25, no.4, p.14-20.

74. Hamada, G.M., 1986" Attacking the problem of earthquake engineering in Egypt": Jr. of Egyptian Soc. of Engineers vol. 25, no.2, p. 56-63.

## **C-PAPERS PRESENTED AT CONFERENCES**

- Abbas M. Al-Khudafi, Hamzah A. Al-Sharifi, Ghareb M. Hamada, Mohamed A. Bamaga, Abdulrahman A. Kadi and A. A. Al-Gathe, 2023, Evaluation of Different Tree-Based Machine Learning Approaches for Formation Lithology Classification, Paper ARMA-IGS-2023-0026 presented at the International Geomechanics Symposium, October 30- November 2, 2023. Al Khobar, Saudi Arabia
- 2. Reda Abduazim and Ghareb Hamada, 2023, Well Placement Design for Enhancing Heat Recovery from Geothermal Systems, SPE-214082-MS, the Gas & Oil Technology Showcase and Conference, 13-15 March 2023, Dubai, UAE

3. Ghareb Hamada, Abdulrageeb AlGathe and Abbas Alkhedefi, 2023, Parallel Self Organizing Neural Network (PSONN) Prediction of Water Saturation in Carbonate Reservoirs, Proceeding of International Conference on IT Innovations and Knowledge Discovery (ITIKD 2023), 8th & 9th March 2023, Manama, Bahrain <u>https://doi.org/10.1109/ITIKD56332.2023</u>, IEEE Xplor.

4. Hamada, G.M. and Abushanab, M., 2023, Neural Network Prediction of Porosity and Permeability of Shaly Gas Sandstone Reservoir Using NMR Data, The 5th International Conference on Engineering Science and Technology (ICEST 2023), February 7-9, Luxor, Egypt

5. Reda Abdel Azim and Ghareb Hamada, 2023, Novel Correlation for Calculating Water Saturation in Shaly Sandstone Reservoirs Using Artificial Intelligence: Case Study from Egyptian Oil Fields The 5th International Conference on Engineering Science and Technology (ICEST 2023), February 7-9, Luxor, Egypt

6. Hamada, G.M., AlGathe, A. A. and Al-Khudefi, A.M., 2022, Parallel Self Organizing Neural Network Estimation of Water Saturation Using Archie' formula of Sandstone, 5th Asia Pacific Meeting on Near Surface Geoscience & Engineering 24-27 October 2022, Taipei, Taiwan.

- 7.. Hamada, G.M., Padmanabhn, E. and Salim, A., 2022, Evaluation of Shale Gas as Unconventional Energy Resources in Sedimentary Basins of South-East Asia Region, 3rd International Conference on Integrated Petroleum Engineering for Energy Transition and Sustainable Development, 6<sup>th</sup> October, 2022, Hanoi, Vietnam.
- 8. Hamada, G.M. A. El-Sakka and Yniem, C., 2019, Improved Determination of Water Saturation and Porosity of Shaly Sand Reservoirs Using Artificial Neural Networks.2<sup>nd</sup> EAGE-VPI Conference Reservoir Geoscience, 2-3 December, Hanoi, Vietnam

9. Fathy, M. Salim, A.M. and Hamada, G.M., 2019, Estimation of Anisotropy-Free Acoustic Impedance from Partial-Stack Seismic Inversion: A Case Study from Inas Field, Malay Basin, EAGE-GSM 2nd Asia Pacific Meeting on Near Surface Geoscience & Engineering, Kuala Lumpur, Malaysia 22-24 April

10. Hamada, G.M. and Joseph, V., 2018, Laboratory based empirical correlations between sound wave velocity, porosity and permeability under different compaction pressures for sandstone core samples, proceeding of 15<sup>th</sup> Regional Congress on Geology, Mineral and Energy Resources of Southeast Asia, 16-17 October, Hanoi, Vietnam.

11. Hamada, G.M. and Chandran, M., 2018, Cased hole Formation Resistivity Identifies Water Zones andImprove Oil Production of Matured Sandstone Reservoirs, SPEKSA# 594, 2018 SPEKSA annual TechnicalSymposium and Exhibition, 23-26 April, Dammam, Saudi Arabia.

12. Al-Shami, T.M., Shiferaw, R.J. and Hamada, G.M., 2018, Effect of Seismic Excitation on mobilization of Trapped Oil Globule in Pore Double Model, Paper# ED018, International Conference on mechanical Engineering and design (ICMED 2018), March 23-28, Langkawi, Malaysia.

12. Hamada, G.M., AlGathe, A.A. and Khudafi, A.A., 2018, Parallel Self Organizing Neural Network (PSONN) Based Estimation of Archie's Parameters and Water Saturation in Sandstone Reservoir, 2018 2nd International Conference on Control Engineering and Artificial Intelligence (CCEAI 2018), 19-21 January, Boracay, Philippines.

13. Mohamed, A. M., Hamada, G.M. and Salim, A.M., 2017, Determination Techniques of Archie's Parameters, a, m and n and its relevant Impact on Water Saturation Values in Sandstone Core Samples, Paper # 41268, APOGCE Petroleum Geoscience Conference, 20-21November, Kuala Lumpur, Malaysia.

14. Hamada, G.M., 2107, TDT and CHFR Logs Can Diagnose Bypassed Oil Zones and Water Zones in Matured Sandstone, Number-MS, SPE Symposium: Production Enhancement and Cost Optimization, 7-8 November, Kuala Lumpur, Malaysia,

16. Mohamed, A. M., Hamada, G.M. and Salim, A.M.A., 2017, Determination Techniques of Archie's Parameters, a, m and n and its relevant Impact on Water Saturation Values in Sandstone and Carbonate Core Samples, SPE # 187889, 17th Russian Petroleum Technology Conference, 16-18 October, Moscow, Russia

17. Hamada, GM, Padmanabhan, P., ElSakka, A. and Salim, AM, 2017, Shale gas potential in these dimentary basins of Malaysia and South East Asia region, National Geoscience Conference (NGC 2017), October 9-10, Kuala Lumpur, Malaysia.

18. Hamada, GM and Elshafei, M., 2017, Prediction of porosity and permeability of heterogeneous shaly gas sandstone reservoirs using neural network algorithm, National Geoscience Conference (NGC 2017), October 9-10, Kuala Lumpur, Malaysia.

19. Hamada, GM and Al-Homedhi, 2017, Developed correlations between porosity, permeability and sound waves velocity at different compaction pressures for sandstone core samples, National Geoscience Conference (NGC 2017), October 9-10, Kuala Lumpur, Malaysia.

20. Hamada, G.M., 2017, Development and Forecasting of the Unconventional Hydrocarbon Reserves as Energy Resource, Intl. Conference on Ideation and Innovation in Sciences and Technology (IISST-17), June 30- July 2, Kuala Lumpur Malaysia.

20. Hamada, G.M., 2016 Characterization Reservoir Fluids Using Resistivity and Sonic LoggingData in Sandstone Reservoirs", MOC, April 19-21, Alexandria, Egypt

21. Al Ghathe, A.A., Hamada, G.M., and AlKhudifi, A.M., 2016, Water Saturation Determination in Carbonate Reservoirs Hybrid Artificial Intelligence Approaches and Conventional Techniques, MOC, April 19-21, Alexandria, Egypt.

22. Hamada, G.M., 2016 " Development and Forecasting of Conventional and Unconventional Hydrocarbon Reserves as Energy Resource in 21<sup>st</sup> Century", 5th conference on Renewables and energy efficiency for desert regions, April 4-6, 2016, Amman, Jordan.

23. Hamada, G.M., 2015 'Characterization of Reservoir Fluids Type and Movability from Well Logging Data", 18<sup>th</sup> Intl Conference on Petroleum, Mineral Resources and Development, Cairo, Egypt, 8-10 February.

24. Hamada, G.M., 2014" Petrophysical Properties Evaluation of Heterogeneous Gas Sandstone Reservoirs with NMR Logging Data", 6<sup>th</sup> (EAGE) Saint Petersburg Conference, Saint Petersburg, Russia, 10-14 April.

25. Hamada G.M., 2013" Archie's Parameters Determination Techniques Techniques in Carbonate Reservoirs: New Technique for Accurate Parameters" PGCE-13, Kuala Lumpur, Malaysia, 18-19 March.

26. Hamada, G.M., 2012 "Petrophysical Properties Evaluation of Tight Gas Sands Using NMR and conventional logs", SPE# 151996, SPE Middle East Unconventional Gas Conference and Exhibition, Abu Dhabi, UAE, 23–25 January.

27. Hamada, G.M., 2011" NMR Can better estimate porosity, permeability and capillary pressure of stratified shaly sand reservoirs" Paper no. RES/PE02, 10<sup>th</sup> OMC, 23-25 March, Ravenna, Italy.

28. Hamada, G.M., Almajed, A.A., Okasha, T.M. and AlGathe, A.A., 2010," Uncertainty analysis of Archie's parameters determination techniques in carbonate reservoirs", 2<sup>nd</sup> OGEP, 18- 20 December, Dhahran, Saudi Arabia.

29. Hamada, G.M. Adrenian, A. and Elshafei, M., 2010 "Functional networks soft sensors for formation porosity and water saturation in sandstone reservoirs", Paper # 7147, 72<sup>nd</sup> EAGE Conference, 14-17 June, Barcelona, Spain.

30. Hamada, G.M. and Elshafei, M.A., 2010 "Neural network (FNN) prediction of porosity and permeability in stratified shaly sand reservoirs" Mediterranean Oil Conference (MOC 2010), 18-20 May, Alexandria, Egypt.

31. Hamada, G.M., 2009 "Integration of NMR and SCAL to estimate porosity, permeability and capillary pressure of heterogeneous gas sand reservoirs", SPE # 121161, SPE EUROPEC Conference, 8-11 June, Amsterdam, The Netherlands.

32. Elshafei, M.A. and Hamada, G.M., 2009 "Neural network prediction of porosity in sandstone reservoirs", SPE # 126042, SPEKSA Technical Symposium, 9-11 May, Dhahran, Saudi Arabia

33. Anderian, A., Elshafei, M.A. and Hamada, G.M., 2009" Function network soft sensor for formation porosity and water saturation in oil wells" Paper# 1569164837, 12 MTC 2009, May 5-7, Singapore.

34. Funk, J., Al-Harbi, A., Hamada, G.M. and Al-Marhoun, M., 2009 "Modeling complex dispersive capacitance in carbonates using portioned NMR T2 distribution", SPE # 126180, SPEKSA Technical Symposium, 9-11 May, Dhahran, Saudi Arabia

35. Elshafei, M.A. and Hamada, G.M., 2009 "Petrophysical properties determination of tight gas sands from NMR data using artificial neural networks", SPE # 118788, SPE Western Regional Meeting, 24-26 March, San Jose, California, USA.

36. Hamada, G.M, Abushanab, M.A. and Oraby, M.El., 2008 "Petrophysical properties evaluation of tight gas sand reservoirs using NMR and conventional openhole logs", SPE # 114254, SPE Asia Pacific Oil & Gas Conference, 20-22 October., Perth, Australia.

37. Hamada, G.M. and Elshafei, M.A., 2008 "Petrophysical properties determination of tight gas sands from NMR Data using Artificial Neural Network", 14<sup>th</sup> Formation Evaluation Symposium of Japan, 29-30 September, Chiba, Japan.

38. Hamada, G.M. and Elshafei, 2008 "Artificial Neural Network permeability estimation from NMR logs in heterogeneous tight gas sand reservoir", SAOGE 2008 Conference, 17-19 November, Dammam, Saudi Arabia.

39. Hamada, G.M., 2008, "Hydrocarbon potential monitoring of by-passed pay zones using TDT and CHFR logs', P325, 70<sup>th</sup> EAGE Conference & Exhibition, 9-12 June, Rome, Italy.

40. Hamada, G.M, 2008" Accuracy analysis of water saturation models in clean and shaly layers", SPE # 120809 presented at SPEKSA Technical Symposium, 10-11 May, Dhahran, Saudi Arabia.

40. Hamada, G.M. and Hegazy, A., 2008 "CHFR can better monitor gas sand pay zones hydrocarbon potential" Geo# 114633, Geo 2008, 3-5, March, Bahrain.

41. Hamada, G.M. and Abushanab, M.A., 2007 "Better porosity estimate of Gas sandstone reservoirs using density and NMR logging data" SPE # 106627, SPE Asia Pacific Conference, October 30- November 1<sup>st,</sup> Jakarta, Indonesia,

42. Hamada, G.M., 2007," Determination of petrophysical properties of tight gas sand reservoir Using NMR and SCAL", 13<sup>th</sup> Formation Evaluation Symposium of Japan, September 27-28, Chiba, Japan.

43. Hamada, G.M. and Hegazy, A.A., 2007 "Hydrocarbon potential monitoring in gas sandstone reservoirs using CHFR and TDT techniques", SPE # 105003, SPE Europec EAGE Annual Conference, June 11-14, London, UK.

44. Hamada, G.M., Abushanab, M.A. and Oraby, M. El, 2007," Integration of NMR with other open hole logs for improved porosity, permeability and capillary pressure of gas sand reservoirs", SPE # 110964, SPEKSA Annual Conference, May, 7-8, Dhahran, Saudi Arabia

45. Hamada, G.M, 2007," Identification of pay zones using compressional wave velocity and shear wave velocity data in sandstone reservoirs ", SPE # 110947, SPEKSA Annual Conference, May, 7-8, Dhahran, Saudi Arabia

46. Elsahafei, M.A., and Hamada, G.M. 2007," Neural network identification of hydrocarbon potential of shaly sand reservoirs", SPE #110959, SPEKSA Annual conference, May, 7-8, Dhahran, Saudi Arabia

47. Hamada, G.M., 2007, "Vp/Vs Identify reservoir fluids type" OMC # 147 presented at 8<sup>th</sup> Offshore Mediterranean Conference OMC 2007, March 28-30, Ravenna, Italy.

48.Hussain, E.E., Abdelwaly, A.A. and Hamada, G.M., 2007, "Effect of water injection on sand Production with in sandstone reservoirs" OMC #"133 presented at presented at 8<sup>th</sup> Offshore Mediterranean Conference OMC 2007, March 28-30, Ravenna, Italy.

49. Hamada, G.M. and ElShafei, M.A., 2007 "Evaluation of petrophysical properties of sandstone reservoirs using artificial network (ANN) approach" ICMSAO # 126 presented at 2<sup>nd</sup> Intl. Conference on Modeling, Simulation and Applied Optimization (ICMSAO'07), March 24-27, Abu-Dhabi, UAE.

50. Hamada, G.M., 2006, "Cased – Hole formation resistivity (CHFR) technique improves Hydrocarbon saturation monitoring in developed reservoirs", SPE # 104472 presented at 2006 SPE Eastern Regional Meeting, 11-13 October, 2006, Canton, USA.

51. Hamada, G.M. 2006, "Identification of hydrocarbon moveability and type from resistivity logs" SPE # 106352, presented at 2006 SPE Saudi Section Symposium, May 21-23, Dhahran, Saudi Arabia.

52. Shanab, M. A., Hamada, G.M., Oraby, M.El. and AbdelWaly, A.A., 2005 " Improved porosity estimation in tight gas reservoirs from NMR and density logs", SCA P001, the 19<sup>th</sup> Intl. SCA Symposium, August 21-25, Toronto, Canada.

53. Hamada, G.M., 2005 "Factor identifies hydrocarbon recoverability and types", SPE # 92660, 14<sup>th</sup> MEOS, Manama, March 12-15, Bahrain.

54. Hamada, G.M. 2005 "Propagation of uncertainties in log data acquisition" OMC # 251 P, Offshore Mediterranean Conference, OMC 2005, March 16-18, Ravenna, Italy.

55. Hamada, G.M., 2004 "Reservoir fluids identification using seismic velocity crossplot", 10<sup>th</sup> Formation Evaluation Symposium of JSPWLA, September 29-30, Chiba, Japan.

56.Hamada, G.M, 2004 "Hydrocarbon moveability Factor (HCM) new approach to identify hydrocarbon moeveability from resistivity logs" 66<sup>th</sup> EAGE Conference, 4-7 June, Paris, France.

57. Hamada, G.M., 2004" Nuclear magnetic resonance log evaluation of low resistivity reservoirs", 8th MPC, 20-22 Feb., Tripoli, Libya.

58. Hamada, G.M., 2003 " Accuracy analysis of water saturation models in clean and shaly layers, Intl SCA Conference, Sept. 21-24, Pau, France.

59. Hamada, G.M., 2002" Recent advances in coring and core analysis for reservoir description": Cairo 2002 CPEX / AAPG / SEG / EGS Conference, Oct. 22-25, Cairo, Egypt.

60. Al-Homadhi, E.S. and Hamada, G.M, 2002" Developed correlations between petrophysical, acoustic, mechanical properties for synthetic sandstone": 2002 Intl. Symposium of the Society of Core Analysts, California, 22-25 Sept, USA.

61. Hamada, G.M., Al-Awad, M.N. and Al-Sughayer, A.A., 2002" Variable saturation exponent effect on the determination of hydrocarbon saturation" SPE Paper # 77887, SPE Asia Pacific Oil & Gas Conference and Exhibition, Oct 8-10, Melbourne, Australia.

62. Hamada, G.M., Al-Awad, M.N. and Al-Sughayer, A. A., 2002" Water saturation computation from laboratory Data 3-D regression ", 10<sup>th</sup> ADIPEC, 13- 16 Oct., Abu Dhabi, UAE.

- 63. Hamada, G.M. and Al-Awad, M.N., 2002" Variable Archie's Formula parameters and its impact on hydrocarbon potential of sand formation "GExploRE 2002 Conference, March 18-20, Boumerdes, Algeria.
- 64. Hamada, 2002 "Recent advances in coring and core analysis for reservoir characterization" 1<sup>st</sup> Kuwait International Petroleum Conference & Exhibition on IOR Management, December 14 -16,Kuwait.

65. Al-Homadhi, E.S. and Hamada, G.M., 2001" Determination of petrophysical and mechanical properties interrelationship for simulated sandstone": 6<sup>th</sup> NORDIC Symposium, 15-16 May, Trondheim, Norway.

66. Hamada, G.M., Al-Awad, M.N., Al-Blehed, M.S. and Al-Saddique, M.A., 2001" Contribution of horizontal drilling technology in the development programs of Saudi oil field": 6th Al-Azhar Engineering Intl. Conference, Sept. 1-4, Cairo, Egypt.

67. Al-Homadhi, E.S. and Hamada, G.M., 2001" Laboratory determination of petrophysical, acoustic and mechanical properties for synthetic sandstone: 7<sup>th</sup> SPWLA Japan Conference, Sept. 27-28. Chiba, Japan.

68. Hamada, G.M., Al-Awad, M.N. and Almalik, M., S., 2001" Log evaluation of low resistivity sandstone reservoirs": SPE Paper # 70040, SPE Permian Basin Oil & Gas Recovery Conference, 15-17 May, Midland, USA.

69. Hamada, G.M. and Al-Awad, M.N., 2001 "Evaluating uncertainty in Archie's water saturation equation parameters determination methods": SPE paper # 68083, SPE Middle East oil show and conference, 17-20 March, Bahrain.

70. Hamada, G.M., Al-Blehed, M.S. and Al-Awad, M.N., 2000" Nuclear magnetic resonance log evaluation of low resistivity sandstone reservoirs by-passed by conventional logging analysis": SPE paper # 64406, SPE Asia- Pacific oil & gas conference, 16-18, Oct., Brisbane, Australia.

71. Hamada, G.M. and Al-Awad, M.N., 2000 "Accuracy analysis of Archie's parameters and its impact on water saturation": Sixth well logging Symposium of Japan, 27-29 Sept., Chiba, Japan.

72. Hamada, G.M. and Al-Awad, M.N., 2000 "Use of TDT to monitor gas saturation in heterogeneous reservoirs": SCA Intl. Symposium, 18-22 Oct., Abu Dhabi, UAE.

73. Al-Saddique, N.A., Hamada, G.M. and Al-Awad, M.N.J., 2000" Emerged technology of coring and core analysis": 6<sup>th</sup> Al-Azhar Engineering Intl. Conference, Sept. 1-4, Cairo, Egypt.

74. Hamada, G.M., Assal, A.M. and Ali, M.A., 1999" A computer oriented porosity logs interpretation approach to determine effective porosity and minerals composition in complex lithologies": the 4<sup>th</sup> Petroleum Computer Conference, Cairo, Egypt, 28-29 April.

75. Hamada, G.M., Al-Blehed, M.S. and Al-Awad, M.N., 1999 "Determining petrophysical properties of low resistivity reservoir using NMR": SPE paper # 56789, SPE ATCE, Oct. 03-06, Houston, USA.

76. Al-Blehed, M.S. and Hamada, G.M., 1999 "Emerged horizontal drilling technology and its applications in Saudi oil fields in the last ten years (Arabic language)": Symposium of King Saud University at the Kingdom 100<sup>th</sup> Memorial Day, Oct. 16-27, Riyadh, Saudi Arabia.

77. Al-Blehed, M.S. and Hamada, G.M., 1999 "Emerged horizontal drilling technology and its applications in Saudi oil fields in the last ten years": SPE paper # 57322, SPE Asia Pacific conference, 25-26 Oct., Kuala Lumpur, Malaysia.

78. Hamada, G.M. and Al-Awad, M.N., 1998" Petrophysical properties of low resistivity sandstone reservoirs": SPE Saudi section meeting, Oct., 25-27, Dhahran, Saudi Arabia.

79. Hamada, G.M. and Al-Awad, M.N., 1998" Evaluation of low resistivity sandstone reservoirs": SCA paper # 9851, SCA Intl. Symposium, Sept 14-16, The Hague, The Netherlands.

- Hamada, G.M. and Al-Awad, M., N., 1998" Well log evaluation of shaly sandstone reservoirs", The 5<sup>th</sup> Intl. Symposium on Evaluation of Reservoir Wettability and Its Effect on Oil Recovery, June 22-24, Trondheim, Norway.
- 81. Dawood, A., Hamada, G.M., Abd El-Dayem, M., 1998" Comparison between different shaly sand models": EGPC 14<sup>th</sup> conference, Oct. 14-18, Cairo, Egypt.
- Dawood, A., Ibrahim, A.A., El- Tayeb, S. and Hamada, G.M., 1998" Estimation of hydrocarbon saturation in low resistivity formations": Part 1" EGPCC 14<sup>th</sup> Conference, Oct. 14- 18, Cairo, Egypt.
- 83. Hamada, G.M. and Heikel, 1998" Gas detection model applied to heterogeneous reservoir using TDT": Paper JJJ, SPWLA 39<sup>th</sup> annual logging symposium, May 26-29, Keystone, USA.

84. Hamada G.M. and Al-Awad, M.N., 1998" Recent advances in coring technology and core analysis to enhance reservoir evaluation": Annual Saudi Aramco conference, May 11-12, Dhahran, Saudi Arabia.

85. Hamada, G.M., 1997" Petrophysical evaluation of low resistivity sandstone reservoirs": 3<sup>rd</sup> Nordic petroleum technology conference, Feb. 14-16, Gothenburg, Sweden.

86. Heikel, S., Hamada, G.M. and Khalil, M., 1997 "Gas saturation detection model applied to heterogeneous reservoirs (TDT)": SPE paper # 37777, Middle East oil show and conference, March 15-18, Bahrain.

87. Hamada, G.M., 1996" Improved technique to determine Archie's parameters and consequent impact on the exactness of hydrocarbon saturation values": SCA paper # 9623, SCA Intl. Symposium, Sept. 8-10, Montpellier, France.

88. Hamada, G.M., 1996" An integrated approach to determine shale volume and hydrocarbon saturation in shaly sand": SCA paper 9645, SCA Intl. Symposium of SCA, Sept. 8-10, Montpellier, France.

89. Hamada, G.M., Assal, A.M. and Ali, M.A., 1996," Improved technique to determine Archie's parameters and consequent impact on the exactness of hydrocarbon saturation values", SCA paper 9623, SCA Intl. Symposium of SCA, Sept. 8-10, Montpellier, France.

90. Hamada, G.M., Assal, A.M. and Ali, M.A., 1996" A computer oriented porosity logs interpretation approach to determine effective porosity and mineral composition in complex lithologies": 14<sup>th</sup> EGPC conference, Oct. 22-24, Cairo, Egypt.

91. Hamada, G.M., 1996" Horizontal well technology in Egypt: An Overview": presented at EGPC seminar on horizontal well technology in Egypt, EGPCE, July 26, Cairo, Egypt.

92. Hamada, G.M., 1995" Characterization of lithofacies properties of reservoir rocks using combined logging data in horizontal wells": Regional symposium on improved oil recovery in the Gulf region, Dec. 17-19, Al-Ain, UAE.

93. Hamada, G.M., Assal, A.M. and Ali, M.A., 1995" Comparative techniques to determine Archie's parameters": 4<sup>th</sup> Al-Azhar engineering conference, Dec. 13-16, Cairo, Egypt.

94. Hamada, G.M., 1994" Effect of Archie's parameters on hydrocarbon evaluation processes (Arabic language)": 3<sup>rd</sup> conference on the geology of the Middle East, Oct.3-5, Amman, Jordan.

95. Hamada, G.M., 1994" Effect of Archie's saturation exponent values on the hydrocarbon evaluation processes (English and Chinese languages)": Intl. Symposium on well logging, SPWLA China, may 26-29, Xian, China.

96. Hamada, G.M. and Dahroug, S., 1993" Attenuation and velocity of seismic waves diagnostic parameters: Gulf of Suez, Egypt": Mediterranean Petroleum Conference and Exposition, Jan 18-21, Tripoli, Libya.

97. Hamada, G.M., 1993" Scattering and attenuation of seismic waves due to scheelite mineralization": SEG/ CPS Beijing Intl. Geophysical Conference and Exposition, July 13-16, Beijing, China.

98. Hamada, G.M. and Dahroug, S., 1992" Analysis of attenuation- velocity parameters using 3-D seismic data": 19<sup>th</sup> Annual Convention of CSEG, May 16-19, Alberta, Canada.

99. Hamada, G.M., 1992" Determination of rock characteristics using combined log data for Omani oil fields- Case study": Geotomography, Intl. Pub. Of SEGJ, Tokyo, Japan, vol. 2, p. 337-385.

100. Hamada, G.M. and El-Sayed, A.H., 1990" Selection of piping systems specifications for seismic zones, Gulf of Suez, Egypt": 9<sup>th</sup> Intl. Symposium on Earthquake Engineering, Dec. 14- 16, Roorkee, India.

101. Hamada, G.M., 1989" An investigation of geotechnical properties of soil from geophysical data": 4<sup>th</sup> seminar for earthquake observers from African and Arab countries", Feb. 12-22, Cairo, Egypt.

102. Hamada, G.M., Maamoun, M. and Abdel-Moatey, S., 1988" Impact of earthquakes on oil wells in the Gulf of Suez": 9<sup>th</sup> World Conference of Earthquake Engineering, June 17-22, Tokyo, Japan.

103. Hamada, G.M., 1987" Characterization of soil mechanical properties from P & S waves velocity": 3<sup>rd</sup> seminar for earthquake observers from African and Arab countries", Feb. 12-22, Cairo, Egypt.

104. Hamada, G.M., 1987" An investigation of water aquifer characteristics from geophysical data": 3<sup>rd.</sup> Seminar on Hydrogeology of arid and tropical countries, May 13-16, MIT, Cairo University, Cairo, Egypt.

### **D-BOOKS**

- a. Geomorphology Volume2 Edited by Natsuo Asakura SEGJ rq~ernational Publication No. 26 The Society of Explora1ion Geophysidsts of Japan, 1992
- b. Anderian, A., Elshafei, M.A. and Hamada, G.M., 2010 "Artificial intelligence techniquesin reservoir characterization", ISBN- 3639244267, Publisher VDM Verlag.
- c. Ghareb M. Hamada and Veronique Joseph, 2018 "Seismic Waves Attributes in Determination of Mechanical and Petrophysical Properties of Sandstone Reservoir, Chapter of Book Titled: Smart Modelling, Simulation and Optimization for Geo Sciences", Edited Junzo Watada, Springer Publications.
- d. Ghareb Hamada and Mahmoud Abushanab, 2021, Nuclear Magnetic Resonance (NMR) Characterization of Gas Shaly Sandstone Reservoirs, LAP LAMBERT Academic Publishing(2021-09-17) - ISBN-13: 978-620-4-20542-7.

https://morebooks.shop/store/gb/book/nuclear-magnetic-resonance-nmr-characterization/isbn/978-620-4-20542-7

- e. Hamada, G.M., Fundamentals of Formation Evaluation, 2020, The American University ofKurdistan, 2020
- f. Hamada, G.M., 2022, Fundamental of Petroleum Exploration Engineering, The American University of Kurdistan, 2022.
- g. Hamada, G.M., 2022, Introduction to Petroleum Engineering, The American University of Kurdistan, 2022

#### SCIENTIFIC and PROFESSIONAL SOCIETIES

- i. Society of Petroleum Engineers, SPE
- ii. Society of Well Logging Analyst, SPWLA
- iii. Society of Core Analyst, SCA
- iv. Society of Petroleum Engineers, Egypt Section
- v. Registered Board Engineers Malaysia (BEM)
- vi. Geological Society of Malaysia

## PERSONAL SKILLS

Language Skills: English, French and Arabic (Native)

Software Skills: Mat lab, petrel and logic