



CURRICULUM VITAE

Name : **SAGALA FARAD**
Nationality : Ugandan
Date of Birth : 27th March 1987
Place of Birth : Kinoni, Masaka, Ugandan
Marriage Status : Married
Contact Address : Department of Chemical and Petroleum Engineering, Calgary University
Contact phone : + (256)772438981, + (256)703572393
Contact E-mail : fahad.sagala@gmail.com, sagala@inventionplus.biz

1. KEY COMPETENCE SUMMERY

1. **“OIL RECOVERY ENHANCER”** I have knowledge on using various Experimental and simulations techniques with use of various soft wares such as Eclipse to analyze and recommend the appropriate Enhanced recovery techniques for both sand stone and carbonate reservoir such as, chemical, gas, steam flooding and other related methods for improving oil recovery. I also did my master project in enhanced recovery with thesis title *“Effect of pH and slug ratio on alternating ASP with gas on oil recovery”*
2. **“GEOLOGY AND PETRO PHYSICS”**, Knowledge on sedimentary basins, Geological map reading, petroleum origin and migration, trap analysis including the structural and stratigraphic traps, well log interpretation, formation porosity and permeability determination using well logs.
3. **“RESERVOIR ENGINEERING”**, knowledge on Rock Mechanics, well testing, pressure build up tests, deep understanding on water and gas flooding, water and gas



coning, knowledge on drive Mechanisms analysis using material balance equations, analysis of flow in porous medium, relative, permeability curve concept, water influx analysis and its effect on oil recovery.

4. **“PRODUCTION ENGINEERING”**, Competence on using prosper software to predict the well performance, design and analyze the flow of oil from the reservoir to the surface using well performance curves such as IPR, VLP and CP curves to determine the optimum flow rate, tubing size and well life.
5. **“ARTIFICIAL AND GAS LIFT DESIGN SKILLS”**, analysis of producing wells to assess the applicability of gas or artificial lift to improve the oil recovery, distinguishing different types of artificial lift systems, also I possess knowledge on Identification, design & selection of the requirements for artificial lift systems.
6. **“SURFACE FACILITIES ENGINEER”**, knowledge on design of surface facilities for handling oil and gas after production plus principle of liquid & gas separation, sizing & design of separation & stock tank system, identification of requirements for flow control devices & selection of appropriate devices for various operating conditions, identification of requirements for crude oil dehydration, selecting and carrying out the appropriate equipment’s design.
7. **“WELL STIMULATION SKILLS”**, Knowledge on identification of the requirements for stimulation work and selection of the appropriate techniques, advice on selection of the acid type, additive & design acidizing jobs for sandstone & carbonate rocks with clear understanding on fracturing mechanism and parameters for designing fracturing jobs.
8. **“DRILLING AND WELL COMPLETION”**, Knowledge on drilling fluids design, such as environmental friendly drilling fluids, lost circulation materials, pressure concept prediction and detection of kicks plus methods of killing them, knowledge on fishing operation, underbalanced drilling and well abandonment.



9. FIELD DEVELOPMENT PROJECT CORDINATOR, acted as a team leader on student based project for the group that coordinated the development of Tapis oil and gas field in Malaysia involving in all critical stages of field development from exploration and production up to field economics assessment.

2. CURRENT POSITION

PhD Graduate researcher at University of Calgary working on Nano technology application in oil and gas recovery Tittle, “asphaletene inhibition and wettability alteration using Nano particles”

3. PAST EXPERIECE

2. Previously working as the assistant Executive director and same time the operations manager at invention plus group of companies (IPL), position have held for 5 years executing the following activities, designing, developing and implementing the strategic plans of my organization in a cost-effective and time-efficient manner, overseeing the company activities, identify and recommend various investment opportunities for the company, supervision of the company ongoing projects, participating in negotiations and agreements that relate to supply and sell of company products, coordinating company weekly meetings to assess the company progress regarding the weekly set targets, also responsible for the day-to-day operations of the organization, which includes managing committees and staff as well as developing business plans in collaboration with the board, I motivate and mentor my team members, volunteers, and staff, and I timely chair meetings plus reviewing the company budget. Ensuring my company maintains high standards of cooperate citizen and social responsibility regarding daily business operations.
3. I also work as apart time lecturer at the international university of East Africa located in Uganda Kampala (IUEA) in the department of petroleum Engineering and the institute of petroleum studies Kampala (IPS) were I conduct lectures, undergraduate project supervision and all related academic roles as assigned by the department.



3. I worked as a Team leader in the development of tapis oil and gas field (filed development project) for one of the Malaysia's biggest oil field (University based project).
4. I worked as a Graduate research assistant at University Technology Malaysia where I was assigned with various tasks such as writing proposals for grants, publishing technical papers in reputable journals, these papers were mainly focusing on how to enhance oil recovery using various techniques.
5. I also passed at Mantrac Uganda limited (Caterpillar machine dealers) where I was working as a service Mechanical Engineer in the service department, I involved in a variety of tasks which included, trouble shooting, diagnosing and repairing of caterpillar machine such as CAT generators and other heavy tracks, writing weekly engineering reports plus the routine field work.
6. I was also employed as a shift production engineer and head of the regeneration plant at roofing Rolling mills Namave branch Kampala Uganda carrying out various engineering tasks, such as supervising and coordinating machine operators and other plant workers, writing weekly engineering reports, safety officer assessing risk and hazardous areas for safety precautions.

4. PROFESSIONAL MEMBERSHIP

1. Active member of the American Association for science and technology (AASCIT) with membership number (**1005236**)
2. Member, Society of Petroleum Engineers (SPE) –UTM student chapter.
3. Uganda institution of professional engineers (UPE)
4. Senior Member, Makerere University Muslim Alumni Association), Uganda



5. ACADEMIC QUALIFICATION

1. 2015 **First Class** Master of Eng. in Petroleum Eng., university Teknologi Malaysia graduating with CGPA 3.9/4, Thesis topic: *“Effect of pH and slug ratio on alternating ASP with Gas on oil recovery”*
2. 2008-2012 B. Eng. in Bio systems and Mechanical Eng., Makerere University Uganda Kampala graduating with second upper division CGPA 4/5 ”.
3. 2007 Uganda advanced certificate of education (UACE) taking Physics (B), Chemistry(C) and Mathematics(B) and Entrepreneurship (A)(PCM/E)

6. LIST OF PUBLICATIONS

1. Muhammad A. Manan, Sagala Farad*, Ali Piroozian, Mohammed. Jamal A Esmail, 2015

“Effects of nanoparticle types on carbon dioxide foam flooding in enhanced oil recovery”

(Published in Journal of Petroleum Science and Technology on 17th August 2015)

2.Sagala Farad*, MuhammadA.Manan, Norhisyambin Ismail, Hussein Kisiki Nsamba, Emmanuel

Galiwango and Isa Kabenge,2016 “Formulation and characterization of locally extracted lignin

from oil palm empty fruit batch for use in surfactant formulation for enhanced oil recovery”

(Published by American Journal of science and technology on 13th May 2016).

3.Sagala Farad*, MuhammadA.Manan, Wan Mohammad Kamal BinWan Jaafar, Hussein Kisiki

Nsamba,2016 “Enhancing Oil Recovery Using Formulated Surfactants Extracted from Oil Palm



and Local Coconut Coir Containing Lignosulfonate” (*Published by American Journal of science and technology on 11th may 2016*).

4.Sagala Farad, *, Hussein Kisiki Nsamba, Al Hassan A. Ibrahim Makera, Wasswa Joseph and Isa

Kabenge,2016 “Effect of Ph and Slug Ratio on Asp Alternating Gas for Oil Recovery “(*Published In the Journal of material science on 26th April 2016*)

5.Sagala Farad*, Muhammad A. Manan, M. F. Mohd Hafis Irsyad 2016 “Effects of Type of Salt on “Nanoparticle-Stabilized Carbon Dioxide Foam in Enhanced Oil Recovery” :(*Submitted to the Journal of materials engineering on 23th June 2016*)

6. Hussein A. Alahdal, Sagala Farad* MuhammadA.Manan, Isa Kabenge, Hussein Kisiki Nsamba, 2016 “Effect of Wettability on oil recovery and breakthrough time for immiscible gas flooding” (*Accepted to be published by the Journal of petroleum science and technology on 29th July 2016*)

7.Hadyan Hakim, Sagala Farad*, Hussein Kisiki Nsamba, 2016 “The Performance of Polyethylene and Polypropylene Beads towards Drilled Cuttings Transportation in Horizontal Wellbore” (*Submitted to the Journal of petroleum science and engineering on 5th July 2016*)

8. John Mugisa, *, G. W. Nyakairu, Farad Sagala, Synthesis of Na-zeolite on the Basis of Dual Cation/Anion Exchange Capacity with Regeneration Capabilities (*Published by the Journal of material science and applications on July 19, 2016*)

9.Sagala Farad*, John Mugisa, Issham Ismail, Tan Tin Yic, Hussein Kisiki Nsamba and Isa Kabenge, Experimental Investigation of cuttings Lifting Efficiency Using Low and High Density Polyethylene Beads in Different Hole Angles (*Submitted to the Journal of Engineering Science and Technology, an International Journal on 11th August 2016*)



7. SUPERVISION RESPONSIBILITIES

Bachelors of Engineering (Petroleum Engineering)-Under Graduate Thesis

1. **Gatluak***,2016: Advances in drilling technology which have significantly improved drilling capabilities and Safety-Slim-hole drilling technology (*Project Completed*)
2. **Anywar Martin***,2016: Investigating the Effect of Formation Damage On the Performance of Horizontal Wells (Project Completed)

8.TEACHING RESPONSIBILITIES

Under taking the following courses,

1. Principles of oil and gas engineering (Introduction to petroleum engineering)-International University of East Africa Kampala.
2. Oil and gas processing - International university of East Africa Kampala.
3. Oil refining and gas Treatment-Institute of petroleum studies Muyenga Kampala
4. Production engineering- International university of East Africa Kampala.
5. Enhanced oil recovery- International university of East Africa Kampala
6. Seminar project and presentation, drilling engineering reservoir engineering and all related research in oil and gas.

9. Conference participation

1. Oil and Gas Asia 2014 (OGA 2014), Kuala Lumpur Convention Centre, Malaysia under students section.
2. Conference and Exhibition for Offshore Oil and Gas Exploration and Production Kuala Lumpur Convention Centre (March 2015). Focusing on Oil, Gas Exploration, Production, Science, Earth, Science
3. University Teknologi Malaysia oil and gas annual symposium on new enhanced oil recovery techniques and methods.



4. Attended a one-week Academic visit to Halliburton, Geo well services, and UMW worker over operators and learnt different oil and gas operations.

10. References

Assoc.prof. Muhamad A Manan: Head of Department of petroleum & Renewable Energy Engineering (FPREE) University Teknologi Malaysia, 81310 UTM Johor Bahru Malaysia. E-mail: m-amanan@petroleum.utm.my. **Telephone:** +(6)07-5535604, + (6)0197634135

Prof. Madaya Abdul Razak Ismail: Department of petroleum & Renewable Energy Engineering (FPREE) University Teknologi Malaysia, 81310 UTM Johor Bahru Malaysia
Email: razak@petroleum.utm.my.

Dr. Sauda Namyalo: Lecture Department of African languages Makerere University P. O Box7062, Kampala, Email: saudahnm@yahoo.com. **Telephone:** +256776433604