

VELIMA KERUBO OBINO

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RESEARCH INTERESTS

Reservoir Engineering, Enhanced Oil Recovery, Well Testing & Control, Production Engineering

COMPETENCIES

Professional Training – Graduate Engineer holding a Bachelor of Engineering degree in Chemical and Process Engineering currently pursuing a Master of Technology degree in Petroleum Engineering.

Technical Aptitude

- Versed with MATLAB and Reservoir Simulation software (CMG, & PETREL)
- Versed with Python and C++ programming languages
- Competent in Ms. Office, Navision systems, LaTeX & Mendeley
- Versed with ISO 22000 and 9001 principles
- Excellent understanding of surface and borehole water pump design.

Personal Attributes

- Highly motivated, very hardworking, proactive team player with a keen analytical mind and high personal integrity.
- Splendid communication and interpersonal skills.
- Able to work with least supervision while handling high pressure assignments.

WORK EXPERIENCE

Research Assistant – University of Nairobi, Sept 2018 to date.

Overview: Reporting to the Coordinator, Petroleum and Chemical Engineering Programme and working with academic staff, Mechanical and Manufacturing Engineering Department.

Responsibilities

- Deliver select lectures and oversee laboratory sessions, under the supervision of senior faculty.
- Examination coordinator
- Mentoring undergraduate students.

Assistant Sales Engineer - Davis and Shirliff Limited, June 2017 to August 2018.

Overview: Reporting to the Branch Manager and working with a team of sales engineers.

Responsibilities

- Analyzing borehole reports for clients, designing the appropriate pumps for their requirement and preparing sales quotations as per requirement.
- Assess customer concerns as regards their water equipment and recommending appropriate solutions.
- Planning inventory management activities such as stock-taking; receipting and banking operations

Quality Control Technician – Chandaria Industries Limited, Sept 2016 to May 2017

Overview: Reporting to the Quality Assurance Manager and working with a team of quality control technicians.

Responsibilities

- Periodic sampling of tissue and napkin products manufactured, carrying out quality tests- GSM, Brightness test, Tensile strength, Moisture content and pH to ascertain compliance to set quality standards before approval for dispatch.
- Monitoring and control of process parameters – Consistency, Ash content, pH, FPR for purposes of process optimization, waste minimization and energy efficiency.

- Calculation of daily yield, preparation of daily production reports and giving recommendations for continual improvement.

Engineering Intern- Sotik Tea Company, June 2016 – August 2016

Overview: Reporting to the Engineering Manager and working with a team of maintenance supervisors and technicians.

Responsibilities

- Making observations and taking measurements of various process parameters such as temperature and pressure for purposes of process and quality control.
- Inspection of green leaf quality and recommending appropriate withering process to be applied for optimum production.
- Carrying out tea infusion in preparation for tasting of tea liquors; assessment of tea grades in quality control and recommendation of dispatch batches appropriately.

Engineering Intern- Trans Africa Paper Limited, June 2015 – August 2015.

Overview: Reporting to the Production Supervisor and working with production technicians and the quality control team.

Responsibilities:

- Inspection and maintenance of chemical equipment including turbo separators, vibrating screen, refiners, centrifugal cleaners and high-density cleaners.
- Sampling and performing quality tests of tissue paper before clearance for dispatch. Parameters monitored included tensile strength, color shade, brightness, moisture content, texture and Grammage per square metre (GSM)
- Maintaining the effluent treatment plant and ensuring adequate water supply to the production machines.

Quality Control Technician (Internship) - Kisii Bottlers Limited, July 2014- September 2014

Overview: Reporting to the Reporting to the Quality Assurance Manager and working with a team of quality control team and production technicians.

Responsibilities

- Syrup preparation: sugar weighing, filtration, addition of concentrates and brix adjustment.
- Performing microbiology tests on potable water, syrup and beverage to ascertain compliance to the ISO 22000 standards.
- Responsible for the quality control of beverages inclusive of brix adjustment and gas volumes.
- In- house water treatment, chlorination, pH adjustment and interface testing of water. Perform sampling and testing of water samples as per guidelines issued in addition to keeping and submitting records.

EDUCATION BACKGROUND

Level	Year	Institution	Qualification
M. Tech. (Petroleum Engineering)	2021	University of Petroleum and Energy Studies, India	Average CGPA 9.5
B.Eng. (Chemical and Process Engineering)	2016	Moi University, Kenya	First Class Honors
Diploma in Information Communication Technology (Module 1)	2011	Gusii Institute of Technology, Kenya	Credit
Kenya Certificate of Secondary Education (KCSE)	2009	Limuru Girls' School, Kenya	A-
Kenya Certificate of Primary Education (KCPE)	2005	Chepilat Highway Academy, Kenya	A

PUBLICATIONS

1. Velima Kerubo Obino, 2021, "Natural Gas Hydrates: Technical Review and Prospects in Asia", International Journal of Engineering Research & Technology (IJERT), Vol 10, Issue 01 (January 2021), pp. 290-299 (ISSN: 2278-0181)
2. Raju S., Patel M and Obino V., "LP Fracturing: A Review on Waterless Fracturing Technology in Unconventional Reservoir", Journal of Scientific and Engineering Research (JSAER), Vol 8(1), pp 48-54 (ISSN: 2394-2630)
3. Obino, V.; Yadav, U. Application of Polymer Based Nanocomposites for Water Shutoff-A Review. Fuels 2021,2,304-322. <https://doi.org/10.3390/fuels2030018>

WORKSHOPS AND CONVENTIONS ATTENDED

- **Tech Symposium 2020 (27-28th November, 2020)** organized by the University of Petroleum and Energy Studies (UPES), Uttarakhand (India)
- **Unconventional Resources: Shale gas & CBM Exploration and Exploitation International Workshop (25-26th June 2020)** organized jointly by University of Petroleum and Energy Studies (UPES), India and University of Texas Permian Basin, USA
- **9th Annual Convention of FIPI Student Chapters (4th September, 2019)** conducted at Pandit Deendayal Petroleum University (PDPU), Gujarat (India) with the theme "How Digitalization can help in improving Efficiency, Safety and Environment Protection in the Oil and Gas sector."
- **Newton Fund Linkages Workshop. (18th-21st September, 2018)** jointly organized by North Umbria University (UK) and the University of Nairobi (Kenya) with the theme "How resilient manufacturing will address unemployment in Kenya"

SHORT COURSES AND HANDS-ON TRAINING

- **SCILAB**-An open-source substitute for MATLAB (30th May, 2020) - Faculty development program jointly organized by JNTUH College of Engineering and Spoken Tutorial Project, IIT Bombay (India)
- **Python 3.4.3** (30th May, 2020) - Faculty development program conducted through Spoken Tutorial Project, IIT Bombay (India)
- **LaTeX (2nd May 2020)**- Faculty development program jointly organized by Sanjay Ghodawat University, Kolhapur and Spoken Tutorial Project, IIT Bombay (India)
- **Professional Software Training (PST) Program (16th- 22nd December, 2019)**-Successfully completed training a week's training on MATLAB organized by School of Engineering, UPES.
- **Water and Energy Products and Application Course. (7th-9th February, 2018)** This was a short course organized by Davis and Shirliff Limited covering water pumps; pump installation basics; pump controls, electricals and control panels; pool equipment, water treatment; solar products; and power products.
- **ISO Awareness Course. (24th March, 2018)**- This was a short introductory course to ISO 9001:2015 principles organized by Davis and Shirliff Limited administered by Bureau Veritas Kenya with a purpose of acquainting the employees to expected standards of quality and continual improvement.

MEMBERSHIP

- Registered Graduate Engineer in the Engineers Board of Kenya. (2017)
- Member of the Society of Petroleum Engineers, SPE (2019)
- Member of the Federation of Indian Petroleum Industry, FIPI (2019)
- Member of American Association of Petroleum Geologists, AAPG (2019)

CO-CURRICULAR ACTIVITIES AND RESPONSIBILITIES

- Corporate Social Responsibility (Courtesy of Davis and Shirliff) - Visited Kiambu Children's home. (2017)
- Technology Students Association, Welfare committee – Moi University. (2015/2016)
- Class representative - Gusii Institute of Technology (2010)
- Secretary to the Environmental Club- Limuru Girls' School. (2008)
- Head girl in Chepilat Highway Academy. (2005)

REFEREES

Dr. Mandira Agarwal; **Professor-Department of Petroleum Engineering & Earth Sciences, University of Petroleum and Energy Studies**; Dehradun, India; Tel +91 9897060879; Email: magarwal@ddn.upes.ac.in

Dr. Hussein Jama; **Senior Lecturer- Petroleum and Chemical Department, University of Nairobi**; P.O. Box 30197-00100 GPO Nairobi, Kenya; Tel: +254 722337788; Email: husein.jama@uonbi.ac.ke

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