### **CURRICULUM VITAE**

#### **KIBERU**, John Mary

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### **UNIVERSITY QUALIFICATIONS:**

**Dr. rer. nat.** (**PhD**) (*Applied Geophysics-Nuclear Magnetic Resonance*), Technical University of Berlin, Berlin, Germany, 2009.

**Master of Science** (*Applied Geophysics*), ITC, University of Twente, Enschede, the Netherlands, 2002

**Bachelor of Science** (*Geology and Chemistry*), Upper Second Hons, Makerere University, Uganda, 1996

# OTHER POSTGRADUATE COURSES ATTENDED:YEARINSTITUTEQUALIFICATIONS OBTAINED

ITC, The Netherlands	Certificate in Modern Techniques of
	Groundwater exploration Management
Vienna International Center	Certificate in On –Site Inspection by use of
	Geophysical techniques.
FIVA, Denmark	Certificate in Hydrogeophysics
FIVA, DTU	Certificate in Water Resources Management
GFZ, Germany	Certificate in Scientific Drilling
FIVA, Denmark	Certificate in Modeling of Heterogeneity
	and Transport in Geologic media: Transition
	Probability, Markov chains and Random-
	Walk Particle Methods
JUBA, Southern Sudan	Certificate in Oilsim Geophysics
Makerere University	Certificate in GeoCLASS
Golf Course Hotel, Kampala	Certificate in basic cementing processes and
-	Technologies
Makerere University, Uganda	Certificate in basic isotope Hydrology
2010 Mekelle University, Ethiopia	Certificate in Modern Techniques for
	Environmental & sustainable development
	Of earth resources
Golf course hotel, Kampala	Certificate in basic cementing processes and
	ITC, The Netherlands Vienna International Center FIVA, Denmark FIVA, DTU GFZ, Germany FIVA, Denmark JUBA, Southern Sudan Makerere University Golf Course Hotel, Kampala Makerere University, Uganda Mekelle University, Ethiopia

	Technologies
2010 Makerere University, Uganda	Certificate in GeoCLASS
2010 JUBA, Southern Sudan	Certificate in Oilsim Geophysics
2011 Golf Course Hotel, Kampala	Certificate in Petrel 2011
2011 University of Bergen, Norway	Certificate in Petroleum Geophysics
2011 Norsar Innovations AS, Norway	y Certificate in SeisRox software
2012 Makerere University, Kampala	Certificate in Techlog
2013 University of Bergen	Certificate in Rift Tectonics and Sedimentation
2017 CGG Abu-Dhabi	Certificate in Hampson – Russel (Strata, AVO,
LithoSI,	- · · ·
2019 NTNU- Norway	Certificate in Life Cycle Assessment and Environmental
Management Systems	-

### **WORKING EXPERIENCE:**

- August 2003 up to present: Lecturer, Makerere University, Department of Geology and Petroleum Studies, College of Natural Sciences
- April 2003 April 2006: Geophysicist, Geological Survey and Mines Department Entebbe.
- Oct 1999 August 2003: Assistant Lecturer, Makerere University, Department of Geology, Faculty of Science

### LANGUAGE SKILLS:

A. English:	Reading, Writing and Fluent Speaking
B. German	Reading, Writing and Fluent Speaking
C. Swahili	Reading, Writing and Not Fluent Speaking
D. Luganda	Reading, Writing and Fluent Speaking

# **RESEARCH AND OTHER TRAINING:** Selected presentations at international conferences

- 1. Kiberu J. M. Assessment of the capability of Magnetic Resonance Sounding in structurally complex geological formations using post drilling, Deutsche Geophysikalische Gesellschaft (DGG) March 2007 in Aachen, Germany
- Kiberu J. M. Characterization of fractured rock aquifers by Magnetic Resonance Sounding, Deutsche Geophysikalische Gesellschaft (DGG) March 2008 in Freiberg Germany
- Kiberu J. M. Optimised inversion of NMR Data from highly zonated geological formations – Pader Uganda. Deutsche Geophysikalische Gesellschaft (DGG) March 2009 in Kiel Germany.

# **Theses:**

- 1. Kiberu J. M. Induced electrical polarization measurements on a suite of near surface soil samples and their empirical relationship to be selected, M.Sc. Thesis, ITC, University of Twente, 2002, 110p.
- 2. Kiberu J. M. Inversion of One and Two Dimensional Magnetic Resonance Sounding Data in formations with a high degree of hydrogeological zonation, Ph.D. Thesis, Technical University of Berlin (TUB), 2009, 165p.

# **Examination of Master Students:**

2012: OJANGOLE G. F; Gravity and Magnetic data Analysis to detect the origin of Carbon dioxide in Semliki Basin, Albertine Graben. Makerere University, Uganda

2015: PASCAL AWO OJONG; Formation evaluation of designated sandstones from well K-A1, K-A2, A-W1 and A-Y1 of block 2 of the Orange basin (South Africa): An integrated study of lithofacies description and reservoir quality analysis. **University of Western Cape, South Africa**.

2015: MUZZAM ALI HASHIM; Investigating subsurface heterogeneities and its impact on the variation in interval velocities: implications to velocity modelling in the Bredasdorp Basin, South Africa. University of Western Cape, South Africa

2016: JOHN PAUL SSENOGA; Source rock evaluation and maturity modelling through the Turaco wells, Semliki Basin, Western Uganda.

2016: WINFRED KATAIKE; Detection of potential hydrocarbon traps in the Semliki basin using gravity and magnetic data

2016: JOSEPH OKULLO; Estimating groundwater storage in weathered crystalline rock aquifers of Aroca Catchment, Northern Uganda using (Magnetic Resonance Sounding) MRS and aquifer tests

2017: FIRMINUS MUGUMYA; Delineation of Fault features in the Semliki basin, Western Uganda using 3D seismic attributes

2017: BANNET AJUNA; 2D basin and petroleum system modelling of the Semliki basin, Western Uganda.

2017: JULIUS AHEEBWA; Hydrogeological Assessment of sustainable Groundwater Abstraction in Namanve Groundwater well Field, East of Kampala City.

2017: RONALD BWIRE; Rock Physics and Field substitution modelling for the feasibility of Carbon dioxide sequestration in the Semliki Basin, Western Uganda case study: Turaco 3 Well.

2017: BETTY NAKISITA; Source rock maturation and hydrocarbon generation evaluation in the Semliki basin using 3D basin modelling approach.

2021: VICTOR YABAYA: Stress Tensor Inversion using focal mechanisms of Earth quakes recorded in the Rwenzori region, Albertine Rift System

2021: PRAISE KATUSIIME: Hydrocarbon generation, migration and accumulation analysis in the Semliki basin, Albertine Graben, Western Uganda

2022: JUDITH KOBUSINGYE: Assessment of Geological controls on reservoir heterogeneity in Kingfisher oilfield, Lake Albert basin, Western Uganda

# **Supervised Master Students:**

- 1. MWONGYERA H. 2014: Amplitude versus Offset (AVO) modeling as a tool for seismic reservoir characterization of the Semlik Basin.
- 2. TWEBAZE C. 2014: Determining Reservoir distribution in the Turaco Prospect using 3D Seismic attributes.
- 3. NAKAJIGO J.2014: Determination of Reservoir properties of the Semliki basin using well to seismic upscaling methods and rock physics templates
- 4. NANGENDO J. 2014: Quantitative evaluation of 3D Seismic Data to determine Reservoir Properties of the Turaco Prospect in Semliki Basin.
- LULIKA P. 2015: Determination of Petrophysical properties of the Turaco prospect in Semliki Basin in Western Uganda using 3D seismic inversion and Rock Physics templates
- 6. PIDHO J. 2015: Combining Rock Physics Templates with Seismic inversion to characterize the hydrocarbon potential beneath the Kanywataba Prospect, Semliki Basin
- 7. SSERUNJOGI J. 2015: Reservoir characterization using Stochastic Inversion of 3D Seismic Data in the Turaco prospect, Western Uganda
- 8. MUKIIBI I.2015: Establishment of Reservoir Compartmentalization using integrated seismic attributes and petrophysical data in Turaco prospect, Semliki Basin
- 9. WERAGIRE M. 2015: Integrated reservoir modeling of the Turaco prospect of the Semliki basin, Western Uganda
- 10. KICONCO R. 2016: Prediction of Time lapse effects of the reservoir based on petrophysical and 3D seismic data in Turaco prospect, Semliki Basin, Western Uganda

- KIVUMBI D. 2016: Establishing a potential carbon dioxide sequestration site using 3D seismic attributes and well log data around Turaco prospect, Semliki basin, Western Uganda
- 12. MUSHABE G.2016: Identification of incised valleys as potential hydrocarbon reservoirs using 3D seismic attributes, Semliki Basin, Western Uganda
- 13. NYAKETCHO D. 2016: Characterization of thin beds of the Kisegi formation in the Semliki basin, Western Uganda, using well log data
- 14. DEKORI C. 2018: Reservoir characterization and modelling of Fractured Basement hydrocarbon in Ruman Field, Melut Basin, South Sudan
- 15. KIZZA J. 2019: Seismic reservoir characterization of the Semliki basin using coloured inversion constrained with well log data.
- 16. NAFULA M. 2019: Effect of basin evolutionary factors on the reservoir quality of Semliki basin.
- 17. OPIU BALLI P. 2019: Geomechnical characterization of Yabus formation, Palouch formation, Palouch oil field, Melut basin, South Sudan.
- 18. TUMUSIIME H. 2019; Reservoir characterization of the Kisegi formation using rock physics diagnostics.
- 19. YOBU J. M. (2019); Delineation of Petroleum plays in the Semliki basin from a trap perspective.
- 20. NAFULA MONICA (2020): Effect of basin evolutionary factors on reservoir quality of Semliki basin, Western Uganda
- 21 MBENYI DERRICK (2022); Interpretation of structural domains beneath Lake George Edward Basin from Seismic data, Southwest Uganda.

22 OPI BALLI (2022): Geomechanical modelling of subsurface formations in Palouch oil field, Melut basin, South Sudan

# **CURRENT STUDENTS BEING SUPERVISED:**

- 1. CONSCENT ATWEBEMBEIRE: Assessment of hydrocarbon potential in the Lake Edward-George basin, South Western Uganda.
- 2. MALITH RUOP MANGONG: Characterization of the hydrocarbon reservoir potential of the Yabus formation in Melut basin, South Sudan using Rock Physics Templates and inversion of 3D sei9smic data.
- 3. MAWA SAMUEL MICHAEL PAUL: Subsurface facies analysis of Paleogene and Upper Cretaceous Formation, Nahel Oil Field, Melut Basin, South Sudan.
- **4.** KABUYE AARON TTENDO: Integrated 3D facies modelling of the Makondo fault zone in Semliki basin, Albertine Graben-Western Uganda
- 5. NUMFOR AYOONWI NGWA: Fault seal analysis of the lake Edward basin, South Western Uganda

# **PhD SUPERVISION PROJECT:**

**Ms. JOAN NAKAJIGO:** Quantitative reservoir characterization using rock physics, seismic and geological constraints – Examples from Semliki Basin in Albertine Graben

## **PROJECT ENGAGEMENT:**

- Deputy Co-ordinator, EnPeI Project for the establishment of the Masters of Science in Petroleum Geosciences at the Department of Geology and Petroleum Studies, Makerere University.
- Capacity building in Sustainability and Environmental Management (CAPSEM) funded by the European Union
- Dry Rifting In the Albertine Rhino graben (DRIAR) Project funded by the National Science Foundation (NSF)
- ERASMUS-EDU-2022-CBHE STRAND3; Strengthening capacity for ICT usage and policy reforms for relevant and quality masters research process management in Uganda HEIs

### **GRANTS OBTAINED**

- Energy and Petroleum (EnePe) Project Phase 1; establishment of the Masters in Petroleum Geoscience
- Capacity building in Sustainability and Environmental Management (CAPSEM) from European Union
- Makerere University Research Innovation Fund (RIF); An assessment to identify research and training laboratory equipment for petroleum geosciences and engineering for Higher Education Institutions in Uganda

### CONFERENCES

- Capacity building in Sustainability and Environmental Management (CAPSEM) conference, Kampala, September 2019
- > CAPSEM conference on Curriculum Development, Kathmandu University, Nepal, 2019
- CAPSEM conference on a Circular Economy Approach of Blue Green Spaces through Water Re-use and Community Engagement, Bombay, India, 2018
- > CAPSEM industry case presentations in the Netherlands, Norway and Portugal, 2018
- CAPSEM conference on Curriculum Development Lisbon Portugal 2017

## **AWARDS AND SCHOLARSHIPS:**

- A. Government of Uganda sponsorship for the Bachelors Course (B.Sc. Makerere University)
- B. NUFFIC (The Netherlands' scholarship program, M.Sc.)
- C. IAEA (International Atomic Energy Agency)

D PETRAD

E. CTBTO (Comprehensive Treaty for the Ban on Testing of nuclear explosives)

F. DAAD (The Germany Academic Exchange Program for PhD studies

## COOPERATE SOCIAL RESPONSIBILITY

Participated with a team from the Ministry of Water and Environment, National Environment Management and Ministry of Energy in investigating the cracks on the slopes of Mt. Elgon, in Bubita sub-county, Bududa district, during the period of 21<sup>st</sup> August, 2022

#### **REFEREES:**

Assoc. Prof. Michael Owor Department of Geology & Petroleum studies P. O. Box 7062 Kampala Tel: +256-772-625149 Email: <u>michael.owor@.mak.ac.ug</u>

Prof. Tor Arne Johansen University of Bergen Postboks 7803 5020 Bergen Tel: +47 55583415/47 95139224 Email: TorArne.Johansen@uib.no

Prof. Mimonitu Opuwari Head: Petroleum Geosciences Group Department of Earth Sciences University of the Western Cape Robert Sobukwe Road Bellville 7535 Cape Town, South Africa. Office: +27 21 959 2638 Email: mopuwari@uwc.ac.za