



# Curriculum Vitae Of Berihun Mamo Negash

## Personal information

First name / Surname

**Berihun Mamo Negash**

Address

Petroleum Engineering Department, Universiti Teknologi PETRONAS 32610 Seri Iskandar, Perak Darul Ridzuan, Malaysia

Telephone(s)

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[bmamo.negash@utp.edu.my](mailto:bmamo.negash@utp.edu.my) , [negash@alumni.ntnu.no](mailto:negash@alumni.ntnu.no)

Nationality

Ethiopian

Date of birth

Jan, 07 1982

Gender

Male

Language

Amharic, English

## Education

**Dates**

**January 2013 – To date**

Title of qualification

PhD in Chemical Engineering (expected date of completion – February 2017)

Principal subjects/occupational skills covered

- Thesis title "Development of a system identification based proxy model of a hydrocarbon reservoir"
- System identification, Fluid flow , reservoir simulation, computational Methods

Name of university

Universiti Teknologi PETRONAS, Chemical Engineering Department-Perak, Malaysia

**Dates**

**August 2006 – September 2008**

Title of qualification awarded

MSc Degree in Petroleum Engineering, Specializing in Reservoir Engineering

Principal subjects/occupational skills covered

- Thesis title "Investigation of CO<sub>2</sub> Enhanced Field Projects" A research that investigates physical and chemical characteristics of oil fields in relation to injection of carbon Dioxide.
- Fluid flow , reservoir modelling and simulation, computational Methods, Reservoir Recovery techniques,

Name of university

Norwegian University of Science and University, Department of Petroleum Engineering and applied Geophysics-Trondheim , Norway

**Dates**

**September 1999 – June 2004**

Title of qualification awarded

BSc. Degree In Chemical Engineering

Principal subjects/occupational skills covered

- Final Year Project Title "Design and analysis of Evaporative Cooler made from clay" A project that developed a clay cooler which works with only natural deriving force, and is in use in rural villages in Ethiopia.
- Basic chemical Engineering Concepts, such as mass and heat transfer, unit operations, thermodynamics, Flash calculations and many more

Name of University

Bahir Dar University-Chemical Engineering Department- Bahir Dar, Ethiopia

## Work experience

**Dates**

**October 2013 – to date**

Occupation or position held

Lecturer

Main activities and responsibilities

Lecturing, supervision, coordination and Research

Name and address of employer

Universiti Teknologi PETRONAS, Petroleum Engineering Department, 32610 Seri Iskandar, Perak Darul Ridzuan, Malaysia

Type of business or sector

Education

**Dates**

**September 2008 – December 2012**

Occupation or position held

Senior Lecturer

Main activities and responsibilities	Lecturing different courses and Advising Final Year Projects for undergraduate students studying chemical Engineering, Petroleum Engineering, Food and Biochemical Technology, and Industrial Chemistry, taking part in community services, preparing hand outs, evaluating performances of students, coordinating lab classes and research and Development.
Name and address of employer	Bahir Dar University, P.O.Box 26, Bahir Dar-Ethiopia
Type of business or sector	Education
<b>Dates</b>	<b>September 2008 – December 2012</b>
Occupation or position held	Part time Lecturer
Main activities and responsibilities	Lecturing Petroleum Engineering courses and Supervision of final year projects
Name and address of employer	Mekelle University, Mekelle-Ethiopia
Type of business or sector	Education
<b>Dates</b>	<b>June 2005- August 2006</b>
Occupation or position held	Assistant Lecturer
Main activities and responsibilities	Assisting tutor classes for undergraduate students studying chemical Engineering, Food and Biochemical Technology, and Industrial Chemistry, preparing hand outs, evaluating performances of students, taking part in community services, research and Development.
Name and address of employer	Bahir Dar University, P.O.Box 26, Bahir Dar-Ethiopia
Type of business or sector	Education
<b>Dates</b>	<b>June 2004- June 2005</b>
Occupation or position held	Graduate Assistant II
Main activities and responsibilities	Assisting tutor classes for undergraduate students studying chemical Engineering, Food and Biochemical Technology, and Industrial Chemistry, preparing hand outs, evaluating performances of students, taking part in community services, research and Development.
Name and address of employer	Bahir Dar University, P.O.Box 26, Bahir Dar-Ethiopia
Type of business or sector	Education
<b>Administrative Position</b>	
<b>Dates</b>	<b>December 2015 – To date</b>
Occupation or position held	<b>Software coordinator</b>
Main activities and responsibilities	Record and monitor all software available in petroleum engineering department and ensure the usage. Communicate with software developing companies for license renewal and obtain new licences.
Name and address of employer	Petroleum Engineering Department, Universiti Teknologi PETRONAS
Type of business or sector	Education
<b>Dates</b>	<b>February 2012 – December 2013</b>
Occupation or position held	Course Chairperson for Energy and Environment sub section
Main activities and responsibilities	Responsible for all courses and Projects related to energy and Environment
Name and address of employer	Bahir Dar University, School of Chemical and Food Engineering, P.O.Box 26, Bahir Dar-Ethiopia
Type of business or sector	Educational
<b>Dates</b>	<b>September 2009 – December 2012</b>
Occupation or position held	Head of the office of customer relations and Information Production Case Team at the school of chemical and Food Engineering
Main activities and responsibilities	Producing Documents and registering and recruiting Students
Name and address of employer	Bahir Dar University, P.O.Box 26, Bahir Dar-Ethiopia
Type of business or sector	Educational
<b>Dates</b>	<b>September 2010 –December 2012</b>
Occupation or position held	Supervisor of Chemical Process Laboratories
Main activities and responsibilities	Supervising and controlling Chemical Process laboratories, also I am responsible for any kind maintenance of the Equipments.
Name and address of employer	Bahir Dar University, P.O.Box 26, Bahir Dar-Ethiopia
Type of business or sector	Educational
<b>Trainings</b>	
<b>Dates</b>	<b>19 – 22 November 2013</b>

Duration	4 days
Principal subjects/occupational skills covered	Oil and gas project management
Name of Institution	Total Professeurs Associes
<b>Dates</b>	<b>13 and 14 January 2014</b>
Duration	2 days
Principal subjects/occupational skills covered	Effective education delivery workshop
Name of Institution	Universiti Teknologi PETRONAS
<b>Dates</b>	<b>8 and 9 April 2014</b>
Duration	2 days
Principal subjects/occupational skills covered	The art of writing publishable scientific manuscript and beyond
Name of Institution	Universiti Sains Malaysia
<b>Dates</b>	<b>7-11 April 2014</b>
Duration	5 days
Principal subjects/occupational skills covered	Petrel reservoir engineering workflow
Name of Institution	Schlumberger
<b>Dates</b>	<b>29 September 2014 – 2 October 2014</b>
Duration	4 days
Principal subjects/occupational skills covered	Problem Solving and Decision Making
Name of Institution	PETRONAS Leadership centre
<b>Dates</b>	<b>March 2015 – June 2015</b>
Duration	4 months
Principal subjects/occupational skills covered	Reservoir Geomechanics, online course
Name of Institution	Stanford University
<b>Dates</b>	<b>25 and 26 May 2015</b>
Duration	2 days
Principal subjects/occupational skills covered	Kalman Filter, and Beyond: Understanding state estimation concept
Name of Institution	Solution 4U Sdn Bhd
<b>Dates</b>	<b>18 – 21 January 2016</b>
Duration	4 days
Principal subjects/occupational skills covered	Teaching Methodology and Outcome based Education
Name of Institution	Universiti Teknologi Malaysia
<b>Dates</b>	<b>3 – 6 November 2015</b>
Duration	4 days
Principal subjects/occupational skills covered	Basics in Logging Interpretation and Applications to Petroleum Evaluation
Name of Institution	Total Professeurs Associes
<b>Dates</b>	<b>April 2015 – May 2015</b>
Duration	<b>4 Weeks</b>
Principal subjects/occupational skills covered	Oil and gas: from Exploration to distribution
Name of Institution	IFP school, France
<b>Dates</b>	<b>20 August 2011 – 03 September 2011</b>
Title of qualification awarded	Certificate for participation; training on experimental methods and statistical tools.
Principal subjects/occupational skills covered	<ul style="list-style-type: none"> <li>- Designing of Experiments</li> <li>- Application of the SAS software</li> </ul>

Name of Institution	Bahir Dar University-Institute of Technology Bahir Dar - Ethiopia	
Dates	February 2011	
Title of qualification awarded	Certificate for participation on a 1 day training 'Improving to Teach focussing on Scientific Writing;	
Principal subjects/occupational skills covered	Research Methods and how to publish researches.	
Name of Institution	Addis Ababa University and Engineering Capacity Building Program.	
Software skills and competences	<ul style="list-style-type: none"> <li>- Windows and Microsoft Office with VBA programming</li> <li>- Reservoir Simulators, PETREL, ECLIPSE, tNavigator, CMG</li> <li>- MATLAB AND SIMULINK</li> <li>- Aspen plus, Aspen HYSYS</li> <li>- Design Expert</li> <li>- Statgraphics Centurion</li> </ul>	
Course Delivered		
Universiti Teknologi PETRONAS Petroleum Engineering Department	Well Logging and Formation Evaluation, Petroleum Exploration, Reservoir modelling and Simulation, Advanced reservoir simulation, Computational methods, Field Development Project, Petroleum Engineering Thermodynamics	
Bahir Dar University Chemical Engineering Department	<b>Lecture</b>	<b>Laboratories</b>
	Computational Methods, Mechanical Unit Operation, Chemical Engineering Thermodynamics, Modelling and Simulation Equipment Design, Pinch technology	Computer Programming Mechanical Unit Operation Process Control and instrumentation Reaction Engineering
Mekelle University Earth Sciences Department	Reservoir Simulation, Natural gas Engineering, Petrophysical Evaluation, Inverse Problems	
Project Supervision	<ul style="list-style-type: none"> <li>- Seismic-Driven Facies Modeling And Property Distribution In Reservoir Modeling</li> <li>- Assisted History matching by using recursive least square and discrete cosine transform</li> <li>- Application of evolutionary algorithm for assisted history matching</li> <li>- Simulation study of EOR by ASP injection for Berlian East field</li> <li>- Simulation study of low salinity water injection for Berlian East field</li> <li>- Automatic history matching of the PUNQ-S3 reservoir model using proxy modelling and multi_objective optimization</li> <li>- Conceptual framework for using system identification in reservoir production performance</li> <li>- A system identification approach for building a forecasting model of a reservoir under secondary recovery</li> <li>- Assisted history matching using proxy modelling and recursive least square</li> <li>- Formulation of conceptual framework for field development plan in reservoir engineering for Malaysian basin</li> </ul>	
Research Grants	Secured and completed	
		Funding Body
	- Experimental Investigation on the performance of modified fracing fluid on zipper-fracing technology	PRF
	- Investigation on the performance of combined low salinity and polymer/surfactant flooding.	UTP-URIF
	- Development of Production Forecasting Model Based on Residual and Decline Curve Analyses	UTP- I-Gen
	- Reservoir Production Forecasting Using Recursive Least Square.	UTP-STIRF
	- Improvement on carbonation drum and binder for manufacturing of briquettes from Agricultural waste.	BDU
	- Performance Evaluation of Existing Local Edible Oil Extraction Units, collaborative research with United Nations Industrial Development Organization (UNIDO) Bahir Dar Edible oil Cluster	UNIDO

	- Design and Implementation of a Biogas Plant at Bahir dar university	BDU
	- Feasibility Study: "Sandpaper Production around Dejen area, Ethiopia"	BDU
	- Feasibility Study: "Production of Briquette from combustible municipal solid waste"	BDU
	On process	
	Design and Analysis of efficient water coalescer using acoustic energy.	YUTP
	- Quick Performance Evaluation and Sand Prediction of Gas Reservoir using Proxy models	MTJA
<b>Publications</b>	<p><b>Negash, B. M.</b>, Ayoub, M. A., Jufar, S. R., &amp; Robert, A. J. (2017). History Matching Using Proxy Modeling and Multiobjective Optimizations. In <i>ICIPEG 2016</i> (pp. 3-16). Springer, Singapore.</p> <p>Ayoub, M. A., Baladram, H. S., &amp; <b>Negash, B. M.</b> (2017). Optimizing Injection-Perforated Layers of Lateral Continuous Shale During Secondary Recovery—A Simulation Approach. In <i>ICIPEG 2016</i> (pp. 27-43). Springer, Singapore.</p> <p>Salim, A. M. A., <b>Negash, B. M.</b>, &amp; Alansari, A. M. A. (2017). A Diagenetic Facies Model for Characterizing Yanan Formation, Ordos Basin, North Central China. In <i>ICIPEG 2016</i> (pp. 271-278). Springer, Singapore.</p> <p><b>Berihun M. Negash</b>, Lemma D. Tufa, Ramasamy Marappagounder and Mariyamni Bt. Awang. Performance Prediction of a Reservoir Under Gas Injection, Using Output Error Model. Contemporary Engineering Sciences, Vol. 9, 2016, no. 30, 1479 – 1489, HIKARI Ltd, <a href="http://www.m-hikari.com">www.m-hikari.com</a></p> <p><b>Negash, B. M.</b>, Tufa, L. D., Marappagounder, R., &amp; Awang, M. B. (2016). Conceptual Framework for Using System Identification in Reservoir Production Forecasting. <i>Procedia Engineering</i>, 148, 878-886.</p> <p><b>Negash, Berihun Mamo</b>, Lemma Dendena Tufa, and M. Ramasamy. "Performance prediction of a reservoir under gas injection using Box-Jenkins model." International Journal of Oil, Gas and Coal Technology 12.3 (2016): 285-301.</p> <p>Ayoub, Mohammed A., <b>Berihun M. Negash</b>, and Ismail M. Saaid. "Modelling Pressure Drop in Vertical Wells Using Group Method of Data Handling (GMDH) Approach." ICIPEG 2014. Springer Singapore, 2015. 69-78.</p>	
<b>Book Edited</b>	<p>ICIPEG 2014: Proceedings of the 3<sup>rd</sup> International conference on Integrated Petroleum Engineering and Geosciences, Mariyamni Awang, Berihun Mamo Negash, Nur Asyraf Md Akhir, Luluan Almann Lubis, Springer Singapore, 2015</p> <p>ICIPEG 2016: Proceedings of the 4<sup>th</sup> International conference on Integrated Petroleum Engineering and Geosciences, Mariyamni Awang, Berihun Mamo Negash, Nur Asyraf Md Akhir, Luluan Almann Lubis, Abdul Ghani Md. Rafek, Springer Singapore, 2017</p>	
<b>References</b>	<ol style="list-style-type: none"> <li>1. Senior Lecturer, Dr. Lemma Dendena Tufa, Chemical Engineering Department, Universiti Teknologi PETRONAS: Email <a href="mailto:lemma_dendena@utp.edu.my">lemma_dendena@utp.edu.my</a></li> <li>2. Associate Professor, Dr. Lemma Dendena Tufa, Chemical Engineering Department, Universiti Teknologi PETRONAS: Email <a href="mailto:marappagounder@utp.edu.my">marappagounder@utp.edu.my</a></li> <li>3. Professor Jon Kleppe, Department Head and Professor of Reservoir Engineering at the Department of Petroleum Engineering and applied Geophysics of NTNU: Email <a href="mailto:kleppe@ipt.ntnu.no">kleppe@ipt.ntnu.no</a>.</li> </ol>	

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|  | <ol style="list-style-type: none"><li>4. EUR.Eng. Dr. Ralph Lee, Former Assistant Professor of Chemical Engineering, at Bahir Dar University<br/>E-mail: <a href="mailto:ralphnsarah@operamail.com">ralphnsarah@operamail.com</a></li><li>5. Dr. yissaye Kindie, Assistant Professor at the School of Chemical and Food Engineering, IOT-Bahir Dar.<br/>P.O.Box 26, Bahir Dar-Ethiopia. Email <a href="mailto:yisaye@operamail.com">yisaye@operamail.com</a></li><li>6. Dr. Solomon Workneh, Director of the School of Chemical and Food Engineering, P.O.Box 26, Bahir<br/>Dar-Ethiopia Email <a href="mailto:solaw@yahoo.com">solaw@yahoo.com</a></li></ol> |
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