# **Curriculum Vitae**

Name: Matthew Coffie WILSON
Address: Geological Engineering Department

**College of Engineering** 

Kwame Nkrumah University of Science and Technology (KNUST)

Private Mail Bag, University Post Office, Kumasi, Ghana

Date of Birth: 15th May, 1969

Place of Birth: Obuasi Hometown: Saltpond

Status: Married with 3 children

E-mail: regimatt2003@yahoo.co.uk; mcwilson.coe@knust.edu.gh

**Cell Phones:** 0200259747

# (a) Academic Degrees earned with dates

•	Diplom Geologie (MSc Geology)	(2013)
•	Certificate in Leadership and Missions	(2013)
•	Theological and Leadership Studies	(2011)
•	Diploma in Theology and Leadership	(2009)
•	Diplom Mineralogie (MSc Mineralogy)	(2008)
•	Certificate in Theology and Leadership	(2007)
•	Vordiplom Geowissenschaften (BSc Geo-Science)	(2005)
•	Diploma in Geological Engineering	(1997)

#### (b) Institutions attended with dates

• Johannes Gutenberg Universitaet Mainz, Deutschland (Germany) (2010-201	13)
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• Bethany International University, Singapore (2012-2013)

Bund Freikirchlicher Pfingstgemeinden (BFP) Kdoer, Erzhausen (Deutschland)
 (2009-2011)

• Global Ministries and Relief, Inc. Tampa, U.S.A. (Sub-Campus Wiesbaden)

(2009-2010)

•	Ruprecht-Karls Universitaet Heidelberg, Deutschland (Germany)	(2005-2008)
•	Mission Eine Welt, Neuendettelsau, Deutschland	(1-12/2007)
•	Ruprecht-Karls Universitaet Heidelberg, Deutschland (Germany)	(2003-2005)
•	U.S.T. School of Mines, Kumasi (Sub-campus Tarkwa)	(1993-1997)

## **Professional Background**

- Lecturer, Geological Engineering Department KNUST (January, 2016 Present)
- **Head Pastor,** Divine Light Ministries International, Ludwigshafen (Germany) and Kumasi (Ghana)
- **Project Geologist,** BAB Resources (An Exploration, Reserve Evaluation & Mining Consultants), Obuasi, Ghana (Aug., 1997 July, 1999)
- Exploration Geologist, Leo Shield Exploration Company Ghana Limited (April Aug.,1997)

# Supervision of Undergraduate Students project work (BSc)

Kwame Nkrumah University of Science and Technology, Kumasi				
Name and ID No.		•	Project Topic	
1	Agyeiwaa, Beatrice Ofori Baah, Nicholas Okyere Ansah, Dennis Gyamfi	9751613/ 9746413/ 9744813	Effects of Geological Structures on Mineralization (A Case study at Anglo Gold Ashanti – Obuasi Mine)	
2	Dadzie, Jacob Issah, Abdulrahman Mohammed, Rabiu	9747113/ 9749213/ 9750613	Petrographical studies of the Lithologies in the Teberebie Pit, Tarkwa Goldfields	
3	Abekah, Dennis Brandful, Rutherford Kofi Paha, Alexander	2236614/ 2240714/ 2245414	Reconciliation of the modelled thickness and actual thickness of the CDE Reef and its effect on Grade Control: A Case Study at Tarkwa Goldfields Mine	
4	Hayfron, Eric Agyapong, Oduro	2242114/ 2237914	Blast Movement and its effects on Grade Control using Blast Movement Technology: A Case Study at Goldfields Ghana Mines Limited, Tarkwa	
5	Koney, Joshua Ahmed, Fatima Quaye, Eugene E. Nii Ofori	2242314/ 2238214/ 2245914	Causes of dilution in Selective Mining and its effects on Grade of Ore: A Case Study at Goldfields Tarkwa Mines	
6	Obisi, Joseph Adam, Abdul Razak Sekretu, Emmanuel	2244114/ 2237114/ 2246414	Importance of Drilling in Geology (Mining)	
7	Anokye, Isaac Amoako Asante Owusu, Pius	4093615/ 4094215	Effect of Pebble size on gold distribution: A Case Study at Goldfields Tarkwa Mines	

# **Group Supervision Physical Geology Field Mapping Training Programme: LEVEL 200**

No	Class	Mapping area	Date
114	BSc II Geological	Amanchia-Asuonwunu	October, 2018

**Group Supervision Geological Field Mapping Training Programme: LEVEL 200** 

No	Class	Mapping areas	Dates (2 Weeks)
112	BSc II Geological	Nkawie-Amanchia-Asuonwunu	June - Aug 2016
84	BSc II Geological	Nkawie-Amanchia-Asuonwunu	June - Aug 2017
139	BSc II Geological	New Koforidua-Bomfa-Lake Area	June - Aug 2018

**Group Supervision Geological Field Mapping Training Programme: MSc/MPhil** 

No	Class	Mapping areas	Date
15	MSc Geophysical Engineering	Amanchia-Asuonwunu	October, 2017
19	MSc Geophysical Engineering	Amanchia-Asuonwunu	January, 2019

**Regional Geological Field Trips** 

No	Level	Field Trips	Dates (2-4 Days)
112	BSc II Geological Eng.	Birimian-Tarkwaian- Sekondian	2016
115	BSc IV Geological Eng.	Dahomeyan-Togo-Buem-Voltaian	2016
84	BSc II Geological Eng.	Birimian-Tarkwaian- Sekondian	2017
104	BSc IV Geological Eng.	Dahomeyan-Togo-Buem-Voltaian	2017
139	BSc II Geological Eng.	Birimian-Tarkwaian- Sekondian	2018

#### **Research Conducted**

- Quantification of complex flow patterns from experiments of rock analogues and its significance for flow in magmatic rocks
- Integrated interpretation on Exploration using Geophysical and Geochemical Data at Amponyase Concession, Ashanti Goldfields Cooperation, Ghana"

# **Research Project Areas**

- Fractal Geometry
- Petrology of Birimian Rocks in the Bui Belt
- Geochemistry of the Birimian and Tarkwaian Rocks in the Bui Belt

#### **Areas of Interest**

- Petrology and Mineralogy
- Structural Geology
- Mineral Exploration and Mining Geology
- Geochemistry of Major and Trace Elements

#### **List of Publications in Peer Reviewed Journals**

- Wilson, M. C. (2018): Quantification of fracture of rock analogue using a Fractal Geometry Tool Box-Counting. International Journal of Innovative Research & Development. Vol 7 Issue 4 pp 196-207. DOI No.: 10.24940/ijird/2018/v7/i4/APR18060
- Wilson, Matthew Coffie (2018): Effects of quantification of complex flow patterns from experiments of rock analogue and rock analogue mixed with chemical impurities (graphite). International Journal of Innovative Research & Development. Vol 7 Issue 8 pp 280-292. DOI No.: 10.24940/ijird/2018/v7/i8/AUG18057

#### **Taught Courses**

- GED 154 Introduction to Information Technology
- GED 153 Engineering Technology
- CDT 159 Geology and Mineralogy of Ceramic Raw Materials
- GED 164 Computer Applications
- GED 258 Optic Mineralogy
- GED 267 Computer Programming
- CENG 291 Engineering in Society
- GED 458 Project II Project work supervision

### **Short Courses / Workshops**

- Improving quality of higher Education through effective measurement and evaluation. 8<sup>th</sup>
   Summer School KNUST, Kumasi, Ghana 20-24/08/2018
- How to control illegal mining activities in Ghana at the University of Mines and Technology, Tarkwa, Ghana
   7/2017
- Atomic Absorption Spectroscopy on Principles, Sample Preparation, Analysis, and Practical Applications at KNUST, Kumasi, Ghana
   10/2016
- Certificate in Coaching, Self-Marketing and Profiling for University Graduates. Institute for Advancement in Education and Integration Consulting, Mainz 04/07 11/08/2014
- Concepts & Models of dolomitization A critical reappraisal. International Postgraduate Programme at the Universitaet Heidelberg, Deutschland 24-25/11/2004
- Natural Halogenation Processes in the Environment. International Postgraduate Programme at the Universitaet Heidelberg, Deutschland 04-05/10/2004
- Environmental Mineralogy & Geochemistry of Mine Waste. International Postgraduate Programme at the Universitaet Heidelberg, Deutschland 09-10/10/2003

## **Computer Knowledge**

• Operating System: Very good knowledge in Windows

• Office-Program: Very good knowledge in Microsoft Office

• Scientific Programming: Good knowledge in Adobe Photoshop, Adobe

Illustrator, MATLAB, SURFER; Introduction to ArcGis,

Introduction to Data Mine

#### **Record of Services**

• College of Engineering Sports Committee Representative (Nov., 2017 to Date)

• Geological Engineering Field Mapping Coordinator (Oct., 2017 to date)

• Committee Member for the Management of the Geological Engineering Department Laboratory (Sept., 2017 to date)

• Stakeholder Workshop on how to control illegal mining in Ghana (10/07/2017)

• Geological Engineering Procurement Committee Member (Nov., 2016 to date)

• Civil-Geo Faculty Procurement Committee Member (Nov., 2016 to Date)

• Academic Tutor (Geological Engineering) (Sept. 2016-Date)

• Departmental Website Manager (Geological Engineering) (Aug., 2016 to date)

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#### References

- Prof. S. K. Y. Gawu, Geological Engineering Department, Private Mail Bag, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana
- Dr. E. K. Appiah-Adjei, Geological Engineering Department, Private Mail Bag, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana
- Dr. Mark Peternell, Institute of Geosciences, Johannes-Gutenberg-Universität Mainz, Becherweg 21, 55099 Mainz.