ABRIDGED CURRICULUM VITAE: ING. DR. EMMANUEL AMANKWAH

PERSONAL DATA

Name: Emmanuel AMANKWAH (MGSAE, PE-GhIE, GradGhISEP)

Nationality: Ghanaian

Marital Status Married

Date of birth: 14th July 1973

Phone number: +233 (0) 556249236

E-mail address: emmanuel.amankwah@uenr.edu.gh / amankwah60@gmail.com

Postal Address: University of Energy and Natural Resources (UENR), Department of

Mechanical & Manufacturing Engineering, P.O. Box 214, Sunyani.



Ing. Dr. Emmanuel Amankwah is a Senior Lecturer with over fifteen (15) years of teaching and research experience. He teaches Undergraduates, Masters and PhDs using the CBT approach. He has served as facilitator and consultant on several programmes /projects both locally and abroad, and also as an External Examiner to one of the Technical Universities. Ing. Dr. Amankwah has worked with other colleagues in executing funded projects both nationally and internationally. Among the projects are TALIF, NUFFIC, CIDA, IMEAP projects, etc. He has also served on several Committees and Boards including the Governing Council of the Wa Technical University.

He is a Counsellor and offers various guidance and counselling services to students voluntarily. He is very industrious, amiable, team player, flexible and always wants things accomplished. Ing. Dr. Amankwah is passionate about the sustainability of the environment. His research interest is in the areas of soil and water engineering, environmental and resources management, waste management, agriculture and climate change. He has several publications to his credit.

EDUCATIONAL BACKGROUND

2019 – 2021 University of Cape Coast (UCC), Cape Coast, Ghana

(MA in Guidance and Counselling) – Awaiting Graduation

Major Courses: Behaviour Modification Methods; Personality Theories and Adjustment; Philosophy, Theories and Practice of Counselling; Counselling Techniques and Practicum; Counselling Practicum in Community and Agency Setting; Psychology of Adolescence; Principles of Guidance and Counselling;

Principles of Career Development and Vocational Counselling, etc.

2012 – 2015 Brandenburg University of Technology (BTU), Cottbus – Germany

(PhD in Environmental and Resources Management, Grade: Very good)

Research area: Climate change, irrigation and water resources management

2013 – 2015 Certificates of Accomplishment in Project Planning and Management

2013 - 2014 Master Class Management and Leadership Training, Burlington - USA

(Master Certificate in Business Management)

2005 – 2008	NUFFIC-NPT Programme on Competency Based Training (CBT), NL (Certificate in Competency Based Training)	
	Major Courses: CBT Curriculum Design, Development and Implementation, Teaching Methodology and Moderation Techniques, Students' Assessment and Evaluation, Personal Development Plan, Outreach Programmes, etc.	
2002 – 2004	Brandenburg University of Technology (BTU), Cottbus – Germany (MSc. Environmental and Resources Management; Grade: Very good)	
	Major Courses: Environmental impact assessment, waste management, renewable energy systems, water management, treatment and supply, etc.	
1997 – 2001	Kwame Nkrumah University of Science & Technology (KNUST) - Kumasi (BSc. (Hons) Agricultural Engineering; Grade: 2 nd Class Upper Division)	
	Major Courses: Soil and water engineering, environmental studies, irrigation and drainage, agricultural meteorology and climatology and water engineering, renewable energy systems, etc.	
1994 – 1996	Ghana Secondary Technical School (GSTS) – Takoradi (General Certificate of Education (GCE)) - Advance Level	

PROFESSIONAL EXPERIENCE

Date	Institution	Grade
2018 – Date	University of Energy & Natural Resources	Senior Lecturer
2017 – 2018	Urban Waste Limited, Wa	Consultant
2012 - 2018	Wa Poly technic, Dept. of Agricultural Engineering	Senior Lecturer
June-Aug. 2009	Environmental Protection Agency, Sunyani	Attachment
2006 – 2018	Clean Africa Foundation (NGO), Ghana	Northern Coordinator
2005 - 2012	Wa Polytechnic, Dept. of Agricultural Engineering	Lecturer

LEADERSHIP EXPERIENCE

Sept. 2019 – Date	HoD, Department of Mechanical & Manufacturing Engineering, UENR
Sept. 2018 – Date	Academic Counselor, Dept. of Mech. & Mfg. Eng., UENR
Sept. 2018 – Jan. 2021	Project Coordinator, Dept. of Mech. & Mfg. Eng., UENR.
2017- 2018	HoD, Agricultural Engineering, Wa Polytechnic
Jan-May 2012	Ag. Dean of School of Engineering, Wa Polytechnic
2010 – 2012	Vice Chairman – Polytechnic Teachers Association of Ghana, Wa Polytechnic
2008 – 2010	HoD, Industrial Liaison Department, Wa Polytechnic
2008 - 2010	Ag. Vice Dean of Students' Affairs, Wa Polytechnic
2007 - 2008	Polytechnic Examination Officer, Wa Polytechnic
2006 – 2008	Departmental Examination Officer, Wa Polytechnic

LIST OF RESEARCH AND PUBLICATIONS

- 1. G. E. Sebiawu, G.E, Mensah, J.N, **Amankwah, E**. & Antwi-Akomeah, E. (2020). Toxic Metal Contamination of Locally Produced Tobacco in Tamale Metropolis in Northern Region of Ghana. *Current Journal of Applied Science and Technology*, *39* (44), 15-25. DOI: 10.9734/CJAST/2020/v39i4431147
- 2. Sebiawu E. G., Mensah J. N. & **Amankwah**, E. (2020). Bioaccumulation of Heavy Metals Concentration in Some Selected Cereals Grown Near Illegal Mine Sites at Poyentanga in Wa of the Upper West Region, Ghana. *European Journal of Environment and Earth Sciences*, 1(3), 1-7. http://dx.doi.org/10.24018/ejgeo.2020.1.3.7
- 3. Atta-Darkwa, T., Asomaning, S. K., Agbeshie, A. A., Danso, E. O., Akolgo, G. A., **Amankwah, E**. & Owusu P. A. (2020). Assessment of physicochemical properties of Besease wetland soils, Ghana. *Afr. J. Agric. Res.*, 15 (4), 509 523. https://doi.org/10.5897/AJAR2019.14547
- Akolgo, G.A., Kemausuor, F., Awafo, E.A., Amankwah, E., Atta-Darkwa, T., Essandoh, E.O., Bart-Plange, A. & de Freitas Maia, C.M.B. (2020) Biochar as a Soil Amendment Tool: Effects on Soil Properties and Yield of Maize and Cabbage in Brong-Ahafo Region, Ghana. *Open Journal of Soil Science*, 10, 91-108. https://doi.org/10.4236/ojss.2020.103005
- 5. **Emmanuel**, **A.**, Edward, A., & Thomas, A.-D. (2020). Socioeconomic Impact of Development Projects on the Livelihood of Farmers: A Case Study of the Bui Dam Hydroelectric Project. *Journal of Geography*, *Environment and Earth Science International*, 24(1), 34-44. https://doi.org/10.9734/jgeesi/2020/v24i130192
- 6. Thomas, A.-D., Ofosu, A.**E., Emmanuel,** A., De-Graft, A.J., Ayine, A.G., Asare, A. and Alexander, A. (2020) Comparison and Estimation of Four Infiltration Models. *Open Journal of Soil Science*, *10*, 45-57. https://doi.org/10.4236/ojss.2020.102003
- 7. Amankwah E. (2019). Impact of Climate variability and change on agricultural productivity in the three northern regions of Ghana. *American Journal of Environmental Science and Technology*, 3(1), 30-41
- 8. Mensah J. N., **Amankwah E.**, Attah-Darkwa T. & Sebiawu E. G. (2019). Evaluation of Physico-chemical water quality treatment efficiency: A Case study of Jambussi Water Headworks in the Upper West Region of Ghana. *International journal of Environmental Quality*, *37* (2020), 40-51
- 9. **Amankwah E**. & Mensah J. N. (2019). Rainwater harvesting a potential safety net for water security in Ghana. *Asian Journal of Environment and Ecology*, 10(2), 1-10. https://doi.org/10.9734/ajee/2019/v10i230115
- 10. Amankwah, E. (2019). Tropical Forest: A Potential Resource for Climate Change Mitigation in Ghana. *International Journal of Environment and Climate Change*, 9(8), 435-442. https://doi.org/10.9734/ijecc/2019/v9i830128
- 11. **Amankwah** E.& Hans-Jüngen V.(2017). Perception of irrigation farmers' livelihood on a changing climate in UWR of Ghana. *Journal of Environmental and Natural Resource Management*, 3(2), 30-36.
- 12. Amankwah E. (2015). Impact of Climate Change on Irrigation Water Resource Management; a case study in the Upper West Region. PhD thesis published as book.
- 13. Amankwah E. (2015). Solar Energy: A potential source of energy for agricultural and rural development in Ghana. *Journal of Agriculture and Ecology Research International*, *3*(4), 131-140.
- 14. Amankwah E. (2014). Can Small-Scale Agricultural Schemes in Ghana Survive under Climate Change? *International Journal of Engineering Research and Technology*, *3*(7), 1680-1685.
- 15. Amankwah E. (2014). Rising Temperature and Declining Rainfall: a threat to water security in northern region of Ghana. *British Journal of Applied Science and Technology*, 4(34), 4721-4730.
- 16. Cheo E.A, **Amankwah E.**& Techoro P. S. (2014). Water Harvesting: A Potential means for water security in the Far North Region of Cameroon. *Agric. Res.* Springer DOI 10.1007/s40003-014-0133-7
- 17. Amankwah E. (2013). Impact of illegal mining on water resources for domestic and irrigation purposes. *ARPN Journal of Earth Sciences*, 2(3), 117-121
- 18. Amankwah E. (2013). Environmental Impact Assessment (EIA); A Useful Tool to Address Climate Change in Ghana. *International Journal of Environmental Protection and Policy*, *1*(4), 94-100.

- 19. Amankwah E. (2012). Solid waste management in the Wa Municipality, challenges and the way forward. *International Journal of Advanced Research in Engineering*, *I*(1), 009-014.
- 20. **Amankwah**, E. & Ocloo, T. O. (2012). Contribution of Small Scale Irrigated Agriculture to Food Security. *Journal of Development in Sustainable Agriculture*, 7(2), 115-121.
- 21. Hamidatu, S. D., Adams, R. & **Amankwah E**. (2012). Building on Community Supported Agriculture for Commercial Food Production in the UWR. *ARPN Journal of Agricultural and Biological Science*, 7 (11), 953 957.
- 22. Amankwah, E. (2012). Towards Desertification in the Upper West Region of Ghana. *International Journal of Technology and Management Research*, 1(1), 87-92.
- 23. **Amankwah, E**. and Darimani S.H. (2012). Evaluation of biogas production and slurry from organic solid waste for agricultural productivity and rural development. *International Journal of Current Research*, 4(2), 111-116.
- 24. Quansah P., **Amankwah E**. & Aikins E. (2012). Influence of MASLOC on the Development of Small and Medium Scale Enterprises in the Wa Municipality. *European Journal of Business and Management*, 4 (1), 1-10.
- 25. Amankwah, E. (2011). Integration of biogas technology into the farming system of the three northern regions of Ghana. *Journal of Economics and Sustainable Development*, 2 (4), 76-85.
- 26. **Amankwah, E**. and Swanzy, P. (2011). The role of stakeholders in building adequate competencies among students for the job market: *International Journal of Vocational and Technical Education*, 3 (8), 107-112.
- 27. Amankwah, E. (2011). Relevance of Competency Based Training in Polytechnic Education for National Development. *International Journal of Education and Practice*, 2 (7), 11-22.
- 28. Amankwah, E. (2009). Towards Desertification in the Upper West Region. In: Addo A, Owusu-Sekyere, D.J. & Amoah R.S. (Eds), Proceedings of the 4th National Conference of GSAE on Engineering Solutions for Energy and Food Production. UCC, 19-20 Sept. pp 261 267
- 29. Amankwah, E. (2008). Effect of Climate Change on Food Security in vulnerable areas of Ghana: The case of Upper West Region. In: Albrecht, Egute & Forbid (Eds), Proceedings of the 1st Alumni Conference of UB, Cameroon and BTU, Germany on Risk Assessment and Management for Environmental Protection in Sub-Saharan Africa. Cameroon, 8th 11th December, pp 171-181
- 30. Amankwah, E. (2008). Risk Assessment and Management for environmental protection in sub-Saharan Africa: The case of Ghana. In: Albrecht, Egute & Forbid (Eds), Proceedings of the 1st Alumni Conference of UB, Cameroon and BTU, Germany on Risk Assessment and Management for Environmental Protection in Sub-Saharan Africa. Cameroon, 8th 11th December, pp 53 60

SELECTED CONFERENCES, SEMINARS AND WORKSHOPS ATTENDED

I have attended several workshops, seminars and conferences both locally and abroad among which are

- 1. DAAD Alumni Workshop on "The future of the world's population in sustainable cities" Promising Star Hotel, Breman- Kumasi, February 11-14, 2021
- 2. RCEES Workshop on Thesis Supervision, UENR, Sunyani, 19th 21st January, 2021
- 3. Erasmus+ Project workshop on Students' Centred Learning, UENR, Tyco, Sunyani on 12th 15th January, 2021
- 4. DAAD Alumni Workshop on Community Participation in preventing non-communicable diseases in West Africa, Summit Lodge Hotel, Koforidua, December 16 18, 2020.
- 5. RCEES 2nd International Conference on Engineering, Applied Science and System Modelling, Eusbett, Sunyani, 11th 13th December, 2019
- A two-day leadership training for Deans, Directors, Heads of Department/Division/Sections/Units, UENR, Tyco, Sunyani on 3rd – 4th October, 2019.

- 7. RLC / ZEF Alumni Workshop on Agricultural and Social Transformation *Securing Livelihood in Sub-Saharan Africa*, Bonn, Germany from 1st July 4th July 2019.
- 8. Study Tour to Hannover Messe (Fair) on Energy Exhibition in relation to Fostering Rapid Growth of Decentralized Renewable Energy to Boost Energy Access in Developing Countries, Hannover, Germany from 1st April to 6th April 2019.
- Seminar of International DAAD Alumni Advanced Training Seminar on Fostering Rapid Growth of Decentralized Renewable Energy to Boost Energy Access in Developing Countries, Cottbus, Germany from 24th March to 30th March 2019.
- 10. Seminar on Professional Development Interactive Seminar, Circle Institutional Strengthening Programme, UENR, Sunyani on 21st February 2019.
- 11. Workshop on Good Assessment Practices in Higher Education: Improving Teaching and Learning Workshop, UENR, Sunyani from 16th 17th January 2019.
- 12. Workshop for Capacity Building on Curriculum Development to mount New Programmes NCTE and NAB requirement, UENR, Sunyani from $27^{th} 28^{th}$ September 2018
- 13. Workshop on Curriculum Development, UENR, Sunyani from 14th 15th August, 2018.
- 14. Conference of the Right Livelihood College on Food Security and sustainable agriculture: The future of smallholder farmers, Bonn, Germany from 30th May to 4th June 2015
- 15. Conference of DAAD Graduate Academy on Sustainable Natural Resource Management in Sub-Sahara Africa, Berlin Germany from 25th to 29th September 2013.
- 16. 3rd Annual Research Conference of Koforidua Polytechnic from 17th -19th May, 2010.
- 17. 1st Alumni Conference of UB, Cameroon and BTU, Germany on Risk Assessment and Management for Environmental Protection in Sub-Saharan Africa. Cameroon, 8th 11th December, 2008
- 18. 4th National Conference of GSAE on Engineering Solutions for Energy and Food Production. UCC, 19-20 Sept. 2007

RESEARCH INTEREST

Soil and water engineering, environmental management, waste management, agriculture and climate change.

WORKSHOP FACILITATION SKILLS

I have served as a resource person for several workshops in Ghana, Uganda and Germany among which are:

- CLEAN Africa, IMEAP Project Uganda
- German Return Experts' Seminar Tamale
- POTAG-Wa Chapter, Workshop on "How to publish", 17th May 2016, Wa
- DAAD workshop on "PhD Proposal Writing", 30th -31st August 2016, Accra.

OTHER SKILLS

- Excellent in Microsoft Office application (Word, Excel and PowerPoint), Internet surfing, Data Management and Analysis SPSS, etc.
- Good leadership, team player, interpersonal and managerial skills

LANGUAGE ABILITIES

I have taken German language course up to B1 in Ghana and in Germany at Goethe Institut

	Speaking	Hearing	Writing
English	Excellent	Excellent	Excellent
German	Average	Good	Average

EXTRA CURRICULUM ACTIVITIES

- 1. Reviewer: Scientific African Journal
- 2. **Reviewer:** Asian Research Journal of Agriculture (ARJA)
- 3. **Reviewer:** Journal of Education, Society and Behavioural Science
- 4. **Reviewer:** Journal of Energy Research and Reviews
- 5. Reviewer: International Journal of Technology and Management Research (IJTMR), Koforidua Polytechnic
- 6. Train and education students on environmental issues including formation of environmental clubs in schools

AWARDS

DAAD and Ghana Government Scholarship

Young Scientists Award, Right Livelihood College, Bonn – Germany

REFERENCES

- 1. Ing. Prof. Nana Sarfo Agyeman Derkyi, Dean, School of Engineering, University of Energy and Natural Resources, Sunyani Ghana. Tel: +233 (0) 240161157; Email: nana.derkyi@uenr.edu.gh
- 2. Dr. Solomon Dansieh, Wa Polytechnic, Department of Languages, Wa Technical University (Formally Wa Polytechnic), Wa, E-mail: sdansieh@yahoo.com. Tel: +233(0)244717406
- 3. Prof. Dr. S. K. Agodzo, (Ex. Rector of Wa Polytechnic), Department of Agricultural Engineering, K.N.U.S.T, PMB, Kumasi E-mail: skagodzo7@usa.net. Tel: +233(0)2081 65505
- 4. Prof. Ato Bart-Plange, Department of Agricultural Engineering, K.N.U.S.T, PMB, Kumasi. E-mail: abartp@yahoo.com. Tel: +233-51-60233, Mob. +233(0)244653330