

# CURRICULUM VITAE

## 1. PERSONAL DETAILS

### 1(a). Biodata

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First name:	Albert
Last name:	Banunle
Date and Place of Birth:	May 23, 1988; Kumasi
Nationality:	Ghanaian
Marital Status:	Married
Number of Children:	Three (3)

### 1(b). Contact Details

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*Postal Address:*

Department of Environmental Science  
KNUST, Kumasi.  
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Email: [albert.banunle@knust.edu.gh/asingyea@yahoo.com/](mailto:albert.banunle@knust.edu.gh/asingyea@yahoo.com/)

*Current residential Address:*

V85, Bimfo Akora Street,  
AO-067-8023,  
New Bakoyeden, Obuasi,  
Ashanti Region, Ghana.

### 1(c) Professional Profile and Research Interest

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Albert is a lecturer at the Department of Environmental Science of KNUST and a multidisciplinary environmental scientist with interest in circular bioeconomy/bioresources valorisation (through biochemical and thermochemical conversion), climate-smart agriculture, sustainable waste management practices, environmental partnerships, sustainability governance and human security. He has taught various undergraduate courses, supervised and mentored several students at both undergraduate and postgraduate since his appointment in 2022. In addition to several services, he has offered to the University community and the nation. Albert has served as a consultant on research and development-oriented projects for international and local organizations in the areas of his specialty. Albert is highly dedicated to his duties and has a demonstrable track record of excellence in teaching, research and service

## EDUCATION

### 2(a). Universities Attended With Academic Degrees And Class

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- I. Kwame Nkrumah University of Science and Technology, Kumasi (Ghana) |2018 - 2023| *Ph.D. Environmental Science* (Pass)
- II. University of Aberdeen, Aberdeen (UK) |2020 -2021| *M.Sc. Environmental Partnership Management* (Distinction)
- III. Kwame Nkrumah University of Science and Technology, Kumasi (Ghana) |2014 - 2017| *M.Sc. Environmental Science* (Pass)
- IV. Kwame Nkrumah University of Science and Technology, Kumasi (Ghana) |2008 - 2012| *B.Sc. Agriculture* (Second Class Upper Division)

### 2(b) Training Programmes And Certificate Courses

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- I. *NGO Projects and Operation Management*, Cambridge Center of Excellence, Accra| November 2016|
- II. *Quantitative Risk Modelling*, Kwame Nkrumah University of Science and Technology | Kumasi, Ghana |2016|
- III. *Stata for Econometric Analysis*, Kwame Nkrumah University of Science and Technology | Kumasi, Ghana |2016|

### 2(c) Fellowships, Scholarship And Awards/Honour

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- I. **DANIDA Building Stronger Universities (BSUIII) Fellowship:** awarded by DFC for a Doctor of Philosophy Degree at the Kwame Nkrumah University of Science and Technology with Secondment at the Aarhus University in Denmark from 2018 to 2023.
- II. **Commonwealth Shared Scholarship:** awarded by the UK Foreign and Commonwealth Development Office (FCDO) and the University of Aberdeen to study for an M.Sc. Environmental Partnership degree in the UK from 2020 to 2021.
- III. **Scottish Innovative Student Award (SISA III-INNOVATION CHAMPION):** awarded by the Scottish Institute for Enterprise (SIE) for demonstrating competence in self-awareness and self-efficacy, being flexible and adaptable, opportunity recognition, creative problem-solving collaboration, communication, and research.

## 2(d) Continuous Career Development Workshop And Seminars

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- I. OGR(KNUST) Grant proposal writing retreat |13th-17<sup>th</sup> November, 2023|
- II. College of Science (KNUST) PhD supervision workshop for Senior Members|13-15<sup>th</sup> February 2024

## EMPLOYMENT

### 3(a).Professional Work Experiences

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**Lecturer**, Kwame Nkrumah University of Science and Technology, (Ghana). |2023-Date|

- I develop course materials and teach undergraduate and postgraduate classes of various sizes courses including *Solid Waste Management; Agroecology, Climate Change: Concepts, Impacts and Adaptation; Environmental Management; Project Analysis and Evaluation; and Research Methods.*
- I conduct assessments involving written and practical examinations for courses I teach and have served as an internal examiner for 4 MSc candidates and 1 MPhil candidate in environmental science programs.
- I have also been conducting independent and collaborative research with several peer-reviewed publications made in refereed journals over this period.

**Assistant Lecturer**, Kwame Nkrumah University of Science and Technology, (Ghana). |2022-2023|

- I developed course materials and taught undergraduate classes of various sizes courses including *Agroecology; Solid Waste Management; Biogeography; and Environmental Management.*
- I supervised and mentored 5 undergraduate students to graduate successfully from the B.Sc. Environmental Science program.

**Knowledge Hub Coordinator**, The Commonwealth Scholarship Commission (CSC), UK |2020-2021|

- I served as one of the primary contact persons for over 500 Commonwealth Scholars conducting research or studying programmes related to strengthening resilience and response to crises in the UK.
- I also collaborated with three (3) other coordinators to provide at least two relevant engagement posts, share opportunities, and organise workshops monthly for Commonwealth Scholars using the CSC LinkedIn pages.

**Graduate Assistant**, Kwame Nkrumah University of Science and Technology, Kumasi (Ghana) |2019-2020|

- I was actively engaged in providing administrative and research assistance to the head of the department and other faculty members of the Department of Environmental Science of the university.
- I set up projectors and organised teaching materials for lecturers in the department and also reviewed writeups and guided 5 undergraduate students to write their projects, complete them successfully and graduate.

### **3(b). Research Projects Worked On And Accomplishments**

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**Field Researcher/PhD Student**, DANIDA sponsored Building Stronger Universities (BSUIII) programme (2018-2023) on *Enhancing Bioeconomic Potential of Bioresources from The Owabi Catchment*.

- I developed innovative strategies for harnessing biowaste and invasive plants as bioresources for the production of high-quality compost for agricultural use.
- I conducted field research to test the quality of compost produced and its effect on grain yield in tropical climates.
- I disseminated findings from research through the production of four (4) peer-review publications, one international conference presentation and a lunch seminar at Aarhus University.
- I organised and coordinated a stakeholder workshop bringing together 50 farmers, 10 local assembly staff, staff of Ghana Water Company Limited and interdisciplinary academics to discuss and organise training for dealing with biowaste and invasive plants challenges in the Owabi catchment.

**Research Consultant**, United Nations Development Programme (UNDP) and the West Africa Network for Peacebuilding (WANEP) joint project on a *survey of citizen's perception of good governance in West Africa*. |2022|

- I developed an outline for the research report that was approved by the WANEP Project Team.
- I produced the research report including the data analysis of the field data from Kobo collect toolbox.
- I produced a PowerPoint presentation of the research findings based on the research report.

- I participated in the workshop to validate the findings of the research.

**Researcher**, The Commonwealth Secretariat and JET Educational Service project on *the Impact of COVID-19 on Education Systems in the Commonwealth* | June 2020 to July 2020|

- I worked with nine (9) other researchers across different commonwealth countries on the preparedness and resilience of education systems to COVID19 and future pandemics.
- I led the design of the project methodology and data collection strategies.
- I provided an analysis of Ghana's Government policy and response strategy to Covid19 with a focus on building resilience in the education system against future pandemics.
- I contributed to the compilation of the final report of the research project and manuscript.

**International Research Consultant**, African Centre for the Study and Research on Terrorism (ACSRT) of the AU research project on *the impact of Foreign Terrorist Fighters (FTFs) on terrorism in the Sahel-Sahara Region*| August 2019 to March 2020|

- I conducted a study on the impact of Foreign Terrorist Fighters (FTFs) on terrorism in the Sahel-Sahara Region using social network analysis.
- I visited and conducted surveys with key informants in Mali and Niger to collect primary information on the movement and activities of FTFs in the Sahel.
- I prepared a study report presented to the AU.
- I produced two policy briefs based on the study findings.

**Field Supervisor**, World Food Programme sponsored on *Asset Creation for Resilience project by the World Food Programme* |November to December 2018|

- I participated and contributed to the success of 3-day work for the validation of questionnaires and training of enumerators for fieldwork.
- I successfully Led a team of 4 teaching and research assistants for a two-week data collection in the Upper West Region of Ghana, managing budget, resolving conflict and ensuring quality work.
- I produced a comprehensive report from evaluation of the asset created by WFP for poverty evaluation with recommendations and a roadmap for the way forward.

**Associate Research Consultant**, Commonwealth of Learning (COL) and General Agricultural Workers Union (GAWU) sponsored project *on baseline survey for the*

*implementation of Lifelong Learning for farmers (L3F) in Ghana | March 2014 to December 2014/*

- I planned and carried out a baseline survey on Lifelong Learning for Farmers (L3F) in the Northern region of Ghana.
- I conducted an analysis and prepared a report with a roadmap used in the implementation of the L3F project in Ghana.
- I conducted a learning need assessment of self-help groups (SHGs) of farmers in the Northern Region of Ghana.
- I provided reports and recommended training needs for SHGs of farmers in Ghana.

### **3(c) Teaching Experience**

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#### **Courses Taught (undergraduate level)**

Course	Credit hours	22/23	23/24	24/25	25/26
ENVS153: Biogeography	2	✓	✓		
ENVS 253 Agro-Ecology	2	✓	✓		
ENVS 351 Solid Waste Management	3	✓	✓		
ENVS 354 Project Analysis & Evaluation	3	✓	✓		
ENVS 366 Climate Change: Impacts & Adaptations	2		✓		
ENVS 368 Statistics for Environmental Scientists	2		✓		
ENVS 451 Environmental Management I	3	✓	✓		
<i>ENVS 452 Environmental Management II</i>	3	✓			

### **GRANTMANSHIP/FUNDING/PROJECTS**

- Commonwealth Scholarship Alumni Community Engagement Fund (ACEF) 2024

# SERVICE TO COMMUNITY/NATION

## 4(a) University

### i. Thesis Supervision

*Programme: Environmental Science*

Name of student	Degree	Topic	Status
Rita Ohemeng	MSc	Developing An Integrated Solid Waste Management System for Managing Solid Waste in Developing Countries: A Case Study of Accra, Ghana	Completed
Prince Kudzo Afeleteh	BSc	Utilisation Of Cocoa ( <i>Theobroma cacao</i> ) Pods Husk and Ackee ( <i>Blighia sapida</i> ) Fruit Waste for Biochar Production in Ghana.	Completed
Bronyah Angela	BSc		
Morgan Patrick	BSc		
Naphilia Arkoh	BSc	Localizing Technology for Household Level Compost Production Within Resource-Poor Settings; An Innovative Approach to Sustainable Waste Management	Completed
Susuana Oforiwah Boateng	BSc		
Andy Antwi	BSc	Analysis of the Ecological footprint of students on the Obuasi campus of KNUST	Completed
Abigail Janamah	BSc	Optimal combination of compost and biochar for crop yield and GHG Emission Reduction	Completed
Kingsley King Kwofie	BSc	Waste Management and Resource Recovery Practices in the Obuasi Municipality	Completed
Emmanuel Acheampong	BSc	5Multiple Decision Criteria Analysis of plastic waste management options among households in the Obuasi Municipality	Completed

*Programme: Industrial Finance and Investment programme*

Name of student	Degree	Topic	Status
KORANTENG, Emmanuel	MSc	Valuing Return on Corporate Social Responsibility Investment Among Selected Banks in Ghana	Completed
KARIKARI, Abigail	MSc	Effect Of Government Securities on Banking Sector Profitability in Ghana	Completed
OFORI, Darlington Elorm Kwame	MSc	Corporate Governance Structures and Financial Performance of Quoted and Unquoted Firms in Ghana.	Completed
ATISU, Jerome Christopher	MSc	Board Gender Diversity and Financial Performance of Listed and Unlisted Firms in Ghana.	Completed

**ii. Thesis Examination/Assessment**

Name of student	Degree	Topic	Role
OSEI AMPONG, Richard	MPhil	Comparison Of the Effectiveness and Efficiency of The Activities of Formal and Informal Waste Collectors In The Suame Municipal In The Ashanti Region, Ghana	Internal Examiner
APPIAH-DANQUAH, Daniel	MSc	The Management of The Major Components Of Solid Waste In Senior High Schools In The Cape Coast Metropolis.	Internal Examiner
ABROKWAH, Jennifer	MSc	Edge Effects On Tree Community Structure And Soil Properties	Internal Examiner
	MSc	In The Bobiri Forests Reserve, Ghana	
DJIRACKOR, Deladem	MSc	Abattoir Waste Management In Accra.	Internal Examiner
ADIBASE, George Atanga	MSc	Impacts Of Solid Waste Management in Healthcare Facilities And Their Environmental Challenges In West Mamprusi Municipality	Internal Examiner
ANAMAN, Emmanuel	MSc	Assessing The Occupational Hazards and Safety Practices Among Clinical Staff At Suntreso Government Hospital	Internal Examiner
SULEMANA, Mohammed	MSc	Effectiveness Of Environmental Impact Assessment for Developmental Projects in Central Region, Ghana	Internal Examiner
DAHAMANI, Sylvester Badizemna	MSc	Smallholder Soybean Farmers' Perceptions and Adaptation Practices To Climate Variability In The Gushegu Municipality, Ghana	Internal Examiner



### iii. Academic Tutorship

#### *Academic tutorship list*

Name	Programme	Period
AGBOLOSOO, Setor Kelvin	BSC. ENVIRONMENTAL SCIENCE	2023-Date
AGYABENG, Samuel	BSC. ENVIRONMENTAL SCIENCE	2023-Date
AGYEMAN, Felicia Sekyiwaa	BSC. ENVIRONMENTAL SCIENCE	2023-Date
AGYEN, Isaac Frimpong	BSC. ENVIRONMENTAL SCIENCE	2023-Date
ANTWI, Marilyn Agyapomaa	BSC. ENVIRONMENTAL SCIENCE	2023-Date
ARHIN, Dorcas	BSC. ENVIRONMENTAL SCIENCE	2023-Date
ARKOH, Emmanuel	BSC. ENVIRONMENTAL SCIENCE	2023-Date
ASAMOAH, Christiana	BSC. ENVIRONMENTAL SCIENCE	2023-Date
BAIDOO, Gideon	BSC. ENVIRONMENTAL SCIENCE	2023-Date
BOAFO, Emmanuel Perez	BSC. ENVIRONMENTAL SCIENCE	2023-Date
BOAMAH, Isaaca Krampah	BSC. ENVIRONMENTAL SCIENCE	2023-Date
KOBI, Grace Abenaa	BSC. ENVIRONMENTAL SCIENCE	2023-Date
NKANSAH, John Sarkodie	BSC. ENVIRONMENTAL SCIENCE	2023-Date
ODURO CLEMENT, Anokye	BSC. ENVIRONMENTAL SCIENCE	2023-Date
OTOO, Oliver	BSC. ENVIRONMENTAL SCIENCE	2023-Date
OWUSU BANAHENE, Florence	BSC. ENVIRONMENTAL SCIENCE	2023-Date
OWUSUWAA, Abigail	BSC. ENVIRONMENTAL SCIENCE	2023-Date
QUAYSON, Richard	BSC. ENVIRONMENTAL SCIENCE	2023-Date
TODEME, Bernice	BSC. ENVIRONMENTAL SCIENCE	2023-Date
AGYEN, Acheampong Louis	BSC. ENVIRONMENTAL SCIENCE	2023-Date

### iv. Others

- KNUST Research Fund (KREF) Reviewer (Cycle 8)
- KNUST Research Fund (KREF) Reviewer (Cycle 9)
- GRASAG Research Fund (GRaF) Reviewer (2024)

## 4(a) Nation

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- Judge, World Environment Day Senior High Schools Debate Competition (2024)
- Participant, Stakeholder Workshop for the development of National Biofuel Action Plan (2024)
- Organiser, Workshop on Youth for Sustainable Development for SHS students (2024)

## 5. MEMBERSHIP OF PROFESSIONAL ASSOCIATION/BODIES

- i. Member, International Solid Waste Association (ISWA), 2024-Date
- ii. Ghana Science Association (GSA), 2024-Date
- iii. Circular Economy Club (CEC) |2023-Date|

## 6. RESEARCH OUTPUT AND CONTRIBUTION TO KNOWLEDGE

### 6(a). List Of Publications

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#### *i. Published articles.*

1. Ampong, R. O., Miezah, K., **Banunle, A.**, Amuah, E. E. Y., & Amoah, E. G. (2024). Comparative analysis of the effectiveness and efficiency of formal and informal waste collectors in urban waste management system. *Heliyon*, 10(20).
2. **Banunle, A.** (2024). Determinants of pro-environmental behaviour of urban youth in Ghana. *Environment, Development and Sustainability*, 1-19.
3. Amankwa, J., Damnyag, L., & **Banunle, A.** (2024). Determinants of forest law compliances among inhabitants of local communities surrounding tropical wildlife and forest reserve in Ghana. *Journal of Cleaner Production*, 140964.
4. **Banunle, A.**, Fei-Baffoe, B., Miezah, K., Ewusi-Mensah, N., Jørgensen, U., Aidoo, R., ... & Abaidoo, R. C. (2023). Economic Viability Assessment of Small-Scale Biomass Composting Project Within a Developing Country Context. *Circular Economy and Sustainability*, 1-21.
5. **Banunle, A.**, Fei-Baffoe, B., Miezah, K., Ewusi-Mensah, N., Jørgensen, U., Aidoo, R., ... & Abaidoo, R. C. (2023). Valorisation of Biowaste and Aquatic Invasive Plants Through Compost Production for Agricultural Use. *Waste and Biomass Valorization*, 1-13.
6. **Banunle, A.**, Fei-Baffoe, B. Miezah, K. Ewusi-Mensah, N., Jørgensen, U., Aidoo, R. Amoah, A., Abaidoo, R. C. and Agbeshie, A. A. (2021). Utilisation Potentials of Invasive Plants in the Owabi Dam in the Ashanti Region of Ghana. *BioResources* 16(2), 3075-3095.
7. Agbeshie, A. A., Adjei, R., Anokye, J., & **Banunle, A.** (2020). Municipal Waste Dumpsite: Impact on soil properties and heavy metal concentrations, Sunyani, Ghana. *Scientific African*, e00390.
8. Otchere, K. G., **Banunle, A.**, Yankyera, O. K and Bediako, E (2020). Effect of RTIMP's Commercialisation of Cassava on Household Food Security in the Cape Coast Metropolis in the Central Region of Ghana. *Agricultural And Food Science Journal Of Ghana (AFSJG)*.
9. **Banunle, A.** and Apau, R. (2019). Environmental and Natural Resources Consequences of Arm Conflict and Violent Extremism in Sahelian Countries in Africa. *African Journal for the Prevention and Combating of Terrorism. Vol 8 (1);* 73-92.
10. **Banunle A.**, Fei-Baffoe B, Otchere KG (2018). Determination of the Physico-Chemical Properties and Heavy Metal Status of the Tano River along the Catchment of the Ahafo Mine in the Brong-Ahafo Region of Ghana. *J Environ Anal Toxicol* 8: 574.
11. Osei, C. K., Otchere, K. G., **Banunle, A.**, & Dontwi, I. K. (2017). Trend analysis of Students' Admission, Enrolment and Completion in KNUST Distance Learning Postgraduate Programmes. *Journal of Education and Human Development*, 6(1), 157-164.

12. Osei, C. K., Dontwi, I. K., Otchere, K. G., & **Singye, A. A.** (2015). Curriculum relevance and graduate career: a tracer study of CEMBA, CEMPA and Industrial Mathematics graduates. *Journal of Science and Technology (Ghana)*, 35(2), 89-99.

**ii. Book Chapter**

1. Gaspard-Richards, D., **Banunle, A.**, Kuttoh, N., Mndalasini. P., Osuolale, O., Sebape, K., Shah, P., Tomlinson, J., Walker, C. and Wambwa, D. (2021)"*Preparedness and Resilience of Education Systems to Address Multiple Threats: Pandemics, Hurricanes, Drought, Food Insecurity*" in *The Impact of COVID-19 on Education Systems in the Commonwealth*. The Commonwealth Secretariat, London: UK.
2. Agbeshie, A. A., Adjei, I., Adjei, R., Anokye, J., & **Banunle, A.**, Novor, S. and Khalid, **A. A.** (2020). Impact of Untreated Liquid Waste Disposal on Water Quality in a Tropical Region, In *International Research in Environment, Geography and Earth Science, Volume 3*: Print ISBN: 978-93-90206-35-3, eBook ISBN: 978-93-90206-38-4.

## **6(b) Conferences/Seminars And Workshops Attended**

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**i. Conference participated in**

1. Building Stronger Universities (BSU III) International Conference on Climate Change Resilience, Adaptation and Sustainable Rural Transformation (Kumasi, Ghana), 4th and 5th October, 2022.
2. Building Stronger Universities (BSU III) Conference on Commercialisation of Research Output, KNUST-Kumasi, 2019.

**ii. Papers Delivered at Conferences/Seminars/Workshops**

1. **Banunle, A.**, Fei-Baffoe, B. Miezah, K. Ewusi-Mensah, N., Jørgensen, U., Aidoo, R. Amoah, A., Abaidoo, R. C. and Agbeshie, A. A. (2021). *Compositional Analysis and Evaluation of Bioresources Potential of Aquatic Invasive Plants and Biowaste*. Presented at BSUIII International Conference on Climate Change Resilience, Adaptation and Sustainable Rural Transformation (Kumasi, Ghana), 4th and 5th October, 2022.
2. **Banunle, A.** (2021). *Harnessing Bioresources For Agricultural Productivity Improvement In Ghana*. Lunch Seminar, Aarhus University, (Foulum campus, Denmark), 26 January, 2023.

## **7. SKILLS**

### **7(a). Key Demonstrable Professional Skills**

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- Teaching and Research
- Quantitative and Qualitative Data analysis
- Grant proposal writing
- Report Writing

- Preparation of policy brief
- Project & Partnership Management
- Leadership, interpersonal and communication skills

## 7(b). IT Skills And Statistical Analysis Tools

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- Proficiency in MS Office
- R-Studio for descriptive and inferential analysis
- Stata for econometric and time/panel series analysis
- Jamovi and Statgraphics for data analysis
- Minitab for descriptive and inferential analysis
- SPSS for survey data analysis
- AMOS GRAPHICS for structural equation modelling (SEM)
- ArcGIS for mapping

## 8. REFERENCES

### 1. Prof. B. Fei-Baffoe

Relationship: PhD and MSc Supervisor,

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### 2. Dr Kodwo Miezah

Relationship: PhD co-supervisor

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### 3. Dr Nicholas Spedding

Relationship: MSc Partnership Project Supervisor

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