CURRICULUM VITAE Eric Ofosu Antwi (Ph.D. SPEGHIE) Box 214 Sunyani- Ghana. Google Hangouts ericofosuantwi@gmail.com

PERSONAL INFORMATION



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Sex Male | Date of birth 30/01/1979 | Nationality Ghanaian

POSITION KEY QUALIFICATIONS

Rev. Prof. Ing. Eric Ofosu Antwi is an Associate Professor at the at the Civil Engineering Department of the University of Energy and Natural Resources (UENR) and the founding Director of the Regional Centre for Energy and Environmental Sustainability (RCEES). As the first academic staff member appointed at UENR, Prof. Antwi has helped shaped the University's journey since its inception and has taken on various key leadership roles at national and international levels.

Prof. Antwi was the Head of UENR's first Engineering Department and Acting Director of Works. He is currently the President of the University Teachers Association of Ghana (UTAG) and has helped secure about \$14 million in grants for impactful projects at the University. Prof. Antwi has also chaired boards, including the Brong Ahafo Waste and Allied Services, and is currently the Board Chair for the Sustainable Development Foundation (SUDEF). Additionally, he holds board positions with Dream Renewables and KITE and is the Chairman of the Ghana Institution of Engineering.

Internationally, Prof. Antwi is the Regional Coordinator for the West Africa Centres of Excellence in Energy (WACEENET) and Secretary to the Tripartite Committee Board for Energy Certification in West Africa. He is a visiting professor at the Kwame Nkrumah University of Science and Technology (KNUST), Abdou Moumouni University in Niger, and Chandigarh University in India. As a prolific researcher, he has published over 60 peer-reviewed papers and books, placing him among UENR's top five researchers. In recognition of his outstanding leadership, Prof. Ofosu Antwi was recently named the Best Centre Leader by the World Bank and the African Association of Universities for his visionary leadership.

EDUCATION

Ph.D. Integrated Water Resources Management. (2006- 2011)

UNESCO-IHE and TU-Delft, The Netherlands Thesis: Implications of Upscaling Irrigation Development in the White Volta Basin

MPhil Civil Engineering. (2003- 2005)

Kwame Nkrumah University of Science and Technology Thesis: Drought Preparedness Plan for Kumasi Water Supply System

BSc Civil Engineering. (1998- 2002)

Kwame Nkrumah University of Science and Technology Thesis: Water Balance for the Birim Sub-basin

- Water Food Energy Nexus
- Small Hydropower Development
- Sustainable Irrigation Development
- Small-Scale Irrigation Development
- Energy Efficiency
- Energy Policy

PROFESSIONAL CERTIFICATES

- Project Management Professional (PMP) Certification
- Microsoft Office Project 2016 Certificate
- ITIL Certificate course
- Proposal Writing Certificate Course
- Six Sigma Yellow Belt
- Change Management Certification
- Sustainable Energy Management Professional
- Off-grid Solar PV Installation Certification
- Small Hydropower Engineering Certification

PERSONAL SKILLS

Languages	Speaking	Reading	Writing
English	Excellent	Excellent	Excellent
Asante/Akwapim Twi	Excellent	Very Good	Very Good
French	Beginner	Beginner	Beginner

HOBBIES

- Watching Athletics and Soccer
- Playing Badminton
- Reading
- Music

WORK EXPERIENCE

• April, 2021 – Present

Associate Professor | Civil Engineering Department of University of Energy and Natural Resources (UENR)

• June, 2019 - Present

Director | Regional Center for Energy and Environmental Sustainability (RCEES)

• June, 2016-April, 2020

Senior Lecturer | University of Energy and Natural Resources (UENR)

• September, 2012 – August, 2016

Lecturer | University of Energy and Natural Resources (UENR)

• August, 2012 – August 201)

Project Manager | Water Resources Commission (Ghana)

MEMBERSHIP AND NETWORKS

- Senior Professional Member, Ghana Institution of Engineers (GhIE)
- Member and National Co-ordinator, African Network for Solar Energy (ANSOLE)

- Regional Co-ordinator, West African Centres of Excellence in Energy (WACEENET)
- Co-chair for Ghana, Supergen Energy Network Hub (UK and Ghana)
- Regional Chairman of the Ghana Institution of Engineering for the Brong Ahafo Region

ACADEMIC EXPERIENCE AND ACHIEVEMENTS

- Guest Lecturer, Kwame Nkrumah University of Science and Technology 2009 – Present 2014 – Present
- Guest Lecturer, Abdou Moumouni University, Niamey (Niger). •
- Visiting Professor, Chandigarh University, India, •
- Have supervised over 100 BSc Student undergraduate thesis since joining UENR
- Have supervised and graduated more than 50 MSc Thesis of Postgraduate Students from four different universities (UENR, KNUST, Abdou Moumouni University and University of Port Harcourt, Nigeria)
- Have Supervised 10 PhD candidates out of which 4 have successfully graduated. •
- Have 54 publications in SCOPUS and ranked among the Top 5 Publishers in UENR.
- Have an H-Index of 15 based on SCOPUS which is the 3rd Highest amongst Academics in UENR.

PROJECTS	AND GRAN	IS WON FOR UENR UNDER HIS LEADERSHIP	Project Amount to UENR
•	2013	Royal Society	£ 25,000
•	2014-2017	AfDB-AKKRRP	€ 42,000
•	2015-2022	China South-South	US\$ 5 Million
•	2019-2025	RCEES	US\$ 6.7 Million
•	2020-2022	GEN Design	CAD\$ 15,000
•	2021-2024	Sustaindam	US\$ 42,711.97
•	2022-2026	EPIC Africa	€ 215,000
•	2022-2023	Green People's Energy Project	€ 154,123.60
•	2022-2025	ProREG	€ 50,000
•	2022-	SESC	US\$ 200,000
•	2022-2023	C-CODE	US\$ 100,000
•	2023-2026	TEA-LP	£ 25,000
•	2023-2025	SCOPE	£ 185,000
•	2023	UNOPS	US\$135,000.
•	2023	Higher Education Partnerships in sub-Saharan Africa	£ 97,812
•	2024	International Virtual Cooperation (IVAC)	€ 50,000.00
•	2024	SEED Exchange	€ 399,466.00
•	2024	Moving Impact	£ 156,000
٠	2024	UNEP E-Mobility	US\$ 49,800
•	2024	Climate Adaptation Plans	US\$ 25,000

EXPERIENCE IN UNIVERSITY ADMINISTRATION AND LEADERSHI

- 2012-2014; Foundation Head, Department of Energy and Environmental Engineering •
- 2012-2013; Ag. Director of Works UENR ٠
- 2012-Present; Member, UENR Academic Board ٠
- 2012-Present; Member, School of Engineering Board •
- 2012-214; Executive Member of UENR UTAG •
- 2013-2015 First Chairman of the Hostel Management Committee
- 2014-Present; Member, School of Engineering Appointments and Promotions Committee •
- 2014-2015; Member, Committee for the development of the 10-year Strategic Plan of UENR
- 2014-2015; Member, Committee for the setting up of Dormaa Campus •
- 2014-2021; Member, Development Committee of UENR •
- 2017; Member of Search Committee for Director of Works •
- 2018-2019; Ag. Head, Department of Computer and Electrical Engineering •
- 2018-2021; UENR Council Member, Non-Professorial Rep of Convocation
- 2018-2021; Member, Finance Committee of UENR
- 2018-2021; Member, Standing Committee of UENR

2021-Present

- 2019-Present; Founding Director, Regional Centre for Energy and Environmental Sustainability
- 2020; Chair, Committee for the finalization of the UENR Statutes
- 2020-Present; Member, Entity Tender Committee of STU
- 2021-2022; Chair, Committee for Developing an Annual Program for UENR
- 2022-2023; Member, Planning Committee of the 10th Anniversary of UENR
- 2021-Present; Member, Entity Tender Committee of UENR
- Member of Team that worked on the Development of the Nsuatre Campus
- 2022-Present, Member, School of Energy Appointments and Promotions Committee
- 2022-Present; Member of Committee to advise management on the purchase of Property in Accra for UENR
- 2023-Present, Co-Chair, International Conference on Energy and Engineering
- 2023-Present; President, University Teachers Association of Ghana, UENR
- 2023-Present; UENR Council Member, UTAG-UENR President

INFRASTRUCTURAL PROJECTS UNDERTAKEN UNDER MY LEADERSHIP FOR UENR

- 2012: Construction of 3 new bungalows for the Senior Management of UENR
- 2012: Renovation of Government Bungalows for the Vice Chancellor and Pro Vice Chancellor of UENR
- 2012: Renovation of Girls Dormitory Block for the Administration of UENR
- 2012: Renovation of Classrooms, Odum Block, Finance Block, Hostel, Auditorium, Apel Block, Staff Bungalows and Kitchen
- 2012-2013: Surfacing of 300m road linking the University to the Hostel behind the University Field
- 2012-2013: Construction of new Cafeteria for UENR
- 2012-2013: Design and Construction of the New Library for UENR
- 2012-2013: Design and Construction of Science Block for UENR
- 2012-2013: Design and Construction of the Engineering Laboratory for UENR
- 2012-2013: Design and Construction of the University Main Entrance
- 2012: Design of an ultra-modern Administration Block for UENR
- 2012: Design of Graduate School Block for UENR
- 2012: Design of a Faculty Building for UENR
- 2019 Present: Design and Construction of the RCEES Building at UENR.
- 2021: Design of the Centre of Competence for Digital Education (C-CODE) at UENR

SPECIAL AND NOTABLE ACHIEVEMENTS FOR UENR

- 1. He voluntarily worked for UENR from 9th April 2012 to September 2012 without Salary
- 2. He was the unofficial Driver of the Vice Chancellor and Council Members from May 2012 to September 2012
- 3. He was the unofficial Public Relations Officer of UENR from May 2012 to September 2012
- 4. He was the unofficial Director of Works from 9th April 2012 to September 2012
- 5. He is the First lecturer Appointed in UENR
- 6. As Ag. DoWs in 2012, he saved the University 2.7 million Ghana Cedis from earmarked projects. This savings was added to an available 1.4 million cedis at GET Fund and jointly used to develop the Science Block, Library Block, Engineering Block and the University Entrance.
- 7. As the first Head of Department in the School of Engineering, he led the development of 4 Undergraduate Programs (BSc Mechanical and Manufacturing Engineering, BSc, Electrical and Electronic Engineering and BSc Environmental Engineering) within the first year for the programs to commence in 2013/2014 Academic Year.
- 8. He initiated talks with Newmont Ghana Gold Limited, Ahafo, developed and submitted a proposal to management of UENR on the collaboration between the two institutions in 2014. This proposal led to the commencement of the Kenyasi Campus that is being funded by Newmont Ghana through NADEF.
- He led his department to develop the first postgraduate programs of UENR (MSc/PhD Sustainable Energy Management and Engineering, MSc/PhD Environmental Engineering and Management)

- 10. He provided an amount of 45,000 Euros from his African Development Program to fund the first batch of Postgraduate Students in UENR
- 11. He funded the PhD of one staff of UENR with an amount of 6,000 Euros at UDS from his African Development Bank Project in 2014
- 12. He led the UENR Team to demarcate the land that was provided by the Nsuatre Traditional Council for UENR
- 13. As HOD, he led the UENR team to jointly write the China South-South Cooperation Project with the Ministry of Energy, the project that provided 2,000 Solar Home Systems, 1,000 Solar Street Lights and 500 Inverter Air-conditioners
- 14. He led the UENR Team to write the RCEES proposal that won 6.4 million US\$
- 15. He has through RCEES signed UENR onto over 30 partnership agreements in the form of MOUs with Industry, Research Institutions, Government, Non-Governmental and Academic Institutions both locally and internationally.
- 16. He has helped secure scholarships for over 25 Teaching Assistants who have worked with him since 2012 for their Postgraduate Education both locally and internationally
- 17. He led the RCEES Team to help setup and fund the Centre for Grants and Research and Innovation (CEGRI) in UENR. He used his network to invite the Grants Administration team of Noguchi Memorial Institute at the University of Ghana to train and help setup the Center
- 18. He led the RCEES Team to help setup and fund the Center for Professional Development (CEPDEV) in UENR
- 19. He led the RCEES Team to support the setup and fund the Centre for Entrepreneurship and Business Development (CEBI) in UENR
- 20. He led RCEES to pay for the University to be Signed onto SCOPUS paying annual subscription fee of 13,000 USD since 2020
- He led RCEES to pay for the University to be Signed onto Science Direct paying annual subscription fee of 27,000 USD since 2021. Notably, is the impact that it has created in UENR. Before signing the University to Science Direct, the University's annual publication output was 57 papers, but presently the output of UENR is 287 per Anum.
- 22. He led RCEES to pay for the University to be Signed onto Research Professional paying annual subscription fee of 9,600 USD since 2020
- 23. He led RCEES to pay for the University's first management retreat to a tune of 100,000 cedis in 2023
- 24. He led RCEES to pay for the Turn-it-in software application used by the entire university for checking plagiarism in thesis and publications.
- 25. He successfully led the presentation and defense of the UENR proposal for the development of Nsuatre Campus at the Ministry of Finance for an amount 175 million Euros in the year 2022.
- 26. He has led the RCEES Team to develop an ultra-modern facility for the housing of the RCEES project on Campus costing over 2 million USD.
- 27. He has won a project that has developed a 3-Acre Solar Powered Irrigation System for the University to be used for income generation and training
- 28. He has won a project for the Development of a Centre of Competence for Digital Education and has helped secured philanthropists to develop the facility for UENR for free.
- 29. Since 2012 the projects he has led and jointly won with other partners and the University are in excess of 13 million USD.
- 30. He used his network with NEWMONT Ghana Gold Limited to link the University to the Afosu Traditional Council that has offered UENR a newly completed Training Facility for the commencement of Distance Learning Activities at Akyem Afosu.
- 31. He led RCEES to develop a Regionalization Strategy for UENR that will help in attracting and admitting more international Students for UENR.
- 32. He led RCEES to acquire International Accreditation for the entire University which has put the University on the league of Globally Accredited Universities. This has opened UENR to the International Community with numerous opportunities.
- 33. He led RCEES to acquire International Accreditation for 4 Postgraduate Programs that are run by the Centre. This achievement has made the graduates from the program highly attractive to the international community and is attractive to numerous international students.

- 34. The RCEES project he leads has opened up UENR to the International Community. The Centre has students from 13 African Countries. RCEES admitted the first international students of UENR and championed the setting up of the International Relations Office in UENR.
- 35. He being a consultant on the Ghana goes Solar Project ensured that UENR receives Grid-Tied Solar PV of about 75KW which will be installed in the year 2024.

NATIONAL POSITIONS AND BOARDS

- 1. Board Chairman of Energygo Ltd: 2025-Present
- 2. Board Chairman, Dream Renewables: 2024 Present,
- 3. Board Chairman of Sustainable Development Foundation (SUDEF): 2016 Present,
- 4. Board Member of KITE, 2023 Present,
- 5. Board Chairman Board Chairman of the Brong Ahafo Waste Company Ltd, a subsidiary of JOSPONG Group of Companies 2014 2018.
- 6. Chairman, Ghana Institution of Engineering, Brong Ahafo Region: 2015 2020,
- 7. Member of Council, Ghana Institution of Engineering: 2015 2020,
- 8. Member, Brong Ahafo Regional Tender Review Committee: 2016 2020,
- 9. Member, Bono Regional Tender Review Committee: 2020 Present,
- 10. Member, Entity Tender Committee of Sunyani Technical University: 2020 Present,
- 11. Member, Special committee of the Bono Regional Minister on Technical Issues in the Region: 2020 Present,
- 12. Resident Pastor, Christ Resurrection Church, Kotei, Kumasi: 2009 Present,
- 13. Executive Council Member, Christ Resurrection Church: 2017 Present,
- 14. Speaker Brong Ahafo Traditional Council Lecture Series 2014
- 15. Speaker Sunyani Technical University, Symposium on Advancing Engineering Education 2015
- 16. Speaker Ghana Medical Association Annual Conference, held in Sunyani, 2016
- 17. Speaker World Water Day Celebration 2024, organized by the Ministry of Sanitation and Water Resources.

INTERNATIONAL POSITIONS AND CONSULTANCY

- 1. Development of a five-year Strategic Plan for ERERA, GIZ funded
- 2. Consultant for assessing the extent of Solarization in the WASH Sector of Ghana, USAID funded.
- 3. Consultant for multinational Companies such as the World Bank, and the Africa Development Bank on Energy and Water Resources Management related assignments.
- 4. Consultant for the African Development Bank, on the development of Large Hydropower Schemes in Africa: 2021 Present,
- 5. Consultant for the World Bank on Water Resources Management and Transboundary Water issues in the Volta Basin of Ghana: 2021 2022,
- 6. Regional Co-ordinator, West Africa Centres of Excellence on Energy Network (WACEENET): 2023 Present,
- 7. Secretary for the Tripartite Consultative Framework on ECOWAS Certification of Sustainable Energy Skills for Rural Electrification, ECREEE, West Africa: 2023 – Present,
- 8. Secretary for the Tripartite Consultative Framework on ECOWAS Certification of Sustainable Energy Skills for Energy Efficiency, ECREEE, West Africa: 2023 – Present,
- 9. Secretary for the Tripartite Consultative Framework on ECOWAS Certification of Sustainable Energy Skills for Renewable Energy, ECREEE: 2023 – Present,
- 10. Speaker The Future Energy Show Africa 2023, held in Johannesburg South Africa,
- 11. Speaker The First Africa Energy Technology Conference 2024, held in Accra, Ghana,

AWARDS

- May 1995; First Price, 1500m Interhouse Athletics Competition, POJOSS
- May 1995; Second Price, 800m Interhouse Athletics Competition, POJOSS
- May 1995; Third Price, 400m Interhouse Athletics Competition, POJOSS
- June 1995; First Price, 800m Interhouse Athletics Competition, POJOSS

- June 1995; Second Price, 400m Interhouse Athletics Competition, POJOSS
- June 1995; Third Price, 1500m Interhouse Athletics Competition, POJOSS
- August 1996; First Price, National Maths Quiz for Second Cycle Institutions, Organized by the Mathematical Association of Ghana
- March 2006 December 2011; Awarded Full scholarship to pursue PhD in Integrated Water Resources Management at the Technical University of Delft and UNESCO-IHE in Holland by the then Vice Chancellor of KNUST (Prof. K. A. Andam) and the Civil Engineering Department of KNUST.
- September 2017; Awarded full sponsorship to pursue a short course in Hydropower Engineering at UNESCO-IHE, Delft, The Netherlands
- November, 2023; was awarded the best Centre Leader amongst 46 Centres of Excellence under the ACE IMPACT project in Africa by the World Bank and the African Association of Universities.

RESERCH FOCUS AREAS

- Water Food Energy Nexus
- Small Hydropower Development
- Sustainable Irrigation Development
- Small-Scale Irrigation Development
- Energy Efficiency

PUBLICATIONS IN PEER REVIEW JOURNALS

- Ofosu-Peasah, G., Ofosu E. A., E., Blyth, W., & Effah-Donyina, E. (2024). Assessment of energy security in West Africa: A case study of three countries. *Heliyon*, 10(21). https://doi.org/10.1016/j.heliyon.2024.e39794
- 2. Saka, D., Adu-Gyamfi, J., Skrzypek, G., **Antwi, E. O.**, Heng, L., & Martínez, J. A. T. (2023). Disentangling nitrate pollution sources and apportionment in a tropical agricultural ecosystem using multiple stable isotopes and MixSIAR model. *Environment and Pollution*. https://doi.org/https://doi.org/10.1016/j.envpol.2023.121589
- Ochiegbu, C. V., Gyamfi, S., & Ofosu, E. (2022). Modeling, Simulation and Design of Hydro-Solar Isolated Micro-grid without a Battery Storage System: A Case Study for Aba Business Cluster, Nigeria. International Journal of Engineering Trends and Technology, 70(2), 125–136. https://doi.org/10.14445/22315381/IJETT-V70I2P215
- 4. Ajiboye, O. K., **Ofosu, E. A.**, Gyamfi, S., & Oki, O. (2023). Hybrid Renewable Energy System Optimization via Slime Mould Algorithm. *Int. J. Eng. Trends Technol*, 6, 83-95.
- 5. Ajiboye, O. K., Ochiegbu, C. V., **Ofosu, E. A**., & Gyamfi, S. (2023). A review of hybrid renewable energies optimisation: Design, methodologies, and criteria. *International Journal of Sustainable Energy*, 42(1), 648-684.
- Agyemang-Boakye, B., Ofosu, E. A., Domfeh, M. K., Dekongmen, B. W., Koduah, R. T., Bakuri, R. W., & Kpiebaya, P. (2024). Potential for small hydropower development on the Pumpum River of Ghana using Remote Sensing and Soil Water Assessment Tool. Green Technologies and Sustainability, 2(1), 100063. <u>https://doi.org/10.1016/j.grets.2023.100063</u>.
- 7. Saka, D., Adu-Gyamfi, J., Skrzypek, G., **Antwi, E. O**., Heng, L., & Torres-Martínez, J. A. (2023). Disentangling nitrate pollution sources and apportionment in a tropical agricultural ecosystem using a multi-stable isotope model. *Environmental Pollution*, 328, 121589.
- Obahoundje, S., Diedhiou, A., Dubus, L., Adéchina Alamou, E., Amoussou, E., Akpoti, K., & Antwi Ofosu, E. (2022). Modeling climate change impact on inflow and hydropower generation of Nangbeto dam in West Africa using multi-model CORDEX ensemble and ensemble machine learning. Applied Energy, 325(July). <u>https://doi.org/10.1016/j.apenergy.2022.119795</u>
- Aboagye, B., Gyamfi, S., Ofosu, E. A., & Djordjevic, S. (2022). Characterisation of degradation of photovoltaic (PV) module technologies in different climatic zones in Ghana. Sustainable Energy Technologies and Assessments, 52, 102034.
- 10. Mensah, J. K., **Ofosu, E. A.**, Akpoti, K., Kabo-Bah, A. T., Okyereh, S. A., & Yidana, S. M. (2022). Modeling current and future groundwater demands in the White Volta River Basin of Ghana

under climate change and socio-economic scenarios. Journal of Hydrology: Regional Studies, 41(May), 101117. <u>https://doi.org/10.1016/j.ejrh.2022.101117</u>

- 11. Sarkodie, W. O., **Ofosu, E. A.**, & Ampimah, B. C. (2022). Decision optimization techniques for evaluating renewable energy resources for power generation in Ghana: MCDM approach. *Energy Reports*, 8, 13504-13513. <u>https://doi.org/10.1016/j.egyr.2022.10.120</u>
- 12. Asomaning, J., Antwi, E. O., Laar, C., & Saka, D. (2023). Statistical and isotopic analysis of sources and evolution of groundwater. Physics and Chemistry of the Earth, Parts A/B/C, 129, 103337.
- Ofosu-Peasah, G., Antwi, E. O., Blyth, W., & Sarquah, K. (2022). The impact of climate action on energy security in West Africa: Evidence from Burkina Faso, Ghana and Nigeria. OPEC Energy Review, 46(4), 449–481. <u>https://doi.org/10.1111/opec.12268</u>
- 14. Ochiegbu, C. V., Gyamfi, S., & **Ofosu, E**. Modeling, Simulation and Design of Hydro-Solar Isolated Micro-grid without a Battery Storage System: A Case Study for Aba Business Cluster, Nigeria.
- Lahai, U. M., Ofosu, E. A., Gyamfi, S., Diawuo, F. A., & Patrick Kallon, H. A. (2022). Technical Considerations for the Design and Selection of Improved Cookstoves: A Review. International Journal of Engineering Trends and Technology, 70(12), 439–449. https://doi.org/10.14445/22315381/IJETT-V70I12P242
- Mensah, J. K., Ofosu, E. A., Yidana, S. M., Akpoti, K., & Kabo-bah, A. T. (2022). Integrated modeling of hydrological processes and groundwater recharge based on land use land cover, and climate changes: A systematic review. *Environmental Advances*, 8(March). <u>https://doi.org/10.1016/j.envadv.2022.100224</u>
- Aboagye, B., Gyamfi, S., Ofosu, E. A., & Djordjevic, S. (2021). Degradation analysis of installed solar photovoltaic (PV) modules under outdoor conditions in Ghana. Energy Reports, 7, 6921-6931. https://doi.org/10.1016/j.egyr.2021.10.046
- Aboagye B., Gyamfi S., Ofosu E. A., Djordjevic S. (2022). Characterisation of degradation of photovoltaic (PV) module technologies in different climatic zones in Ghana. Sustainable Energy Technologies and assessments 52 (2022) 102034. <u>https://doi.org/10.1016/j.seta.2022.102034</u>
- Gbedzi D. D., Ofosu E. A., Mortey E. M., Obiri-Yeboah A., Nyanatkyi E. K., Siabi E. K., Abdallah F., Domfeh K. M. and Amankwah-Minka A. (2022). Impact of mining on land use land cover change and water quality in the Asutifi North District of Ghana, West Africa. Environmental Challenges 6 (2022) 100441. <u>https://doi.org/10.1016/j.envc.2022.100441</u>
- Yeboah K. A., Akpoti K., Kabo-bah A. T., Ofosu E. A., Siabi E. K., Mortey E. M., Okyereh S. A. (2022). Assessing climate change projections in the Volta Basin using the CORDEX-Africa climate simulations and statistical bias-correction. Environmental Challenges 6 (2022) <u>https://doi.org/10.1016/j.envc.2021.100439</u>
- Ofosu-Peasah G., Ofosu E. A., Blyth W. (2021). Factors Characterising Energy Security in West Africa: An integrative Review of the Literature. Renewable and Sustainable Energy Reviews 148 (2021) 111259 <u>https://doi.org/10.1016/j.rser.2021.111259</u>
- Jianguo D., Chang G., Adu D., Darko R., Khan M. A. S., Antwi E. O. (2021). Numerical Simulation and Computational Flow Characterization Analyses of Centrifugal Pump Operating as Turbine. Wiley Hindawi Complexity Volume 2021, Article ID 9695452. <u>https://doi.org/10.1155/2021/9695452</u>
- Dekongmen B. W., Kabo-bah A. T., Domfeh M. K., Sunkari E. D., Dile Y. T., Antwi E. O., Gyimah R. A. A. (2021). Flood vulnerability assessment in the Accra Metropolis, southeastern Ghana. AppliedmWater Science (2021) 11:134 <u>https://doi.org/10.1007/s13201-021-01463-9</u>
- 24. Aboagye B., Gyamfi S., **Antwi E. O.**, Djordjevic S. (2021). Status of renewable energy resources for electricity supply in Ghana. Scientific African Volume 11 (2021) <u>https://doi.org/10.1016/j.sciaf.2020.e00660</u>.
- 25. Atta-Darkwa T., **Ofosu E.**, Amankwah E., Ankamah J., Akolgo G., Asare A., Antwi A. (2020). Comparison and Estimation of Four Infiltration Models. Open Journal of Soil Science. 10. 45-57. <u>https://doi.org/10.4236/ojss.2020.102003</u>.
- Domfeh M. K., Gyamfi S., Amo-Boateng M., Andoh R., Antwi E. O., Tabor G. (2020). Numerical Simulation of an Air-Core Vortex and its Suppression at an Intake Using OpenFOAM Fluids (2020), 5, 221; doi:10.3390/fluids5040221.
- Domfeh M. K., Gyamfi S., Amo-Boateng M., Andoh R., Antwi E. O., Tabor G. (2020). Numerical simulation of an air-core vortex at a hydraulic intake using OpenFOAM. Scientific African Volume 8 (2020) <u>https://doi.org/10.1016/j.sciaf.2020.e00389</u>.

- 28. Oti J. O., Kabo-bah A. T., **Ofosu E.** (2020). Hydrologic Response to Climate Change in the Densu River Basin in Ghana. Heliyon Volume 6 (2020). <u>https://doi.org/10.1016/j.heliyon.2020.e04722</u>
- 29. Domfeh M. K., Gyamfi S., Amo-Boateng M., Andoh R., **Antwi E. O.**, Tabor G. (2020). Free surface vortices at hydropower intakes: A state-of-the-art review. Scientific African Volume 8, 2020 <u>https://doi.org/10.1016/j.sciaf.2020.e00355.</u>
- Asamoah, Michael & Kabo-bah, Amos Tiereyangn & Ofosu, Eric. (2020). Spatial and Socio-Economic Impacts Analysis of BUI Hydropower Dam on Downstream Communities. 10.1007/978-3-030-13697-0_23.
- P. N. A. Asare, F. A. Kuranchie, and E. Ofosu (2019). Evaluation of incorporating plastic wastes into asphalt materials for road construction in Ghana. Cogent Environmental Science (2019), 5: 1576373. <u>https://doi.org/10.1080/2331.843.2019.1576373</u>
- Asare P. N. A., Kuranchie F. A., Ofosu E. (2019). Evaluation of incorporating plastic wastes into asphalt materials for road construction in Ghana. Cogent Environmental Science (2019), 5: 1576373. <u>https://doi.org/10.1080/2331 843.2019.1576373</u>
- Gyasi S. F., Boateng A. A., Awuah E., Antwi E. O. (2019). Elucidating the incidence and the prevalence of Schistosomiasis infection in riparian communities of the Bui dam. Journal of Parasitic Diseases. doi/10.1007/s12639-019-01089-4.
- 34. Okyereh S. A., **Ofosu E. A.**, Kabobah A.T. (2019). Modeling the Impact of Bui Dam Operations on Downstream Competing Water Uses. Water-Energy Nexus (2019), <u>https://doi.org/10.1016/j.wen.2019.03.001</u>
- 35. Obahoundje S., Diedhiou A., **Ofosu E. A.**, Anqueti S., François B., Adounkpe J., Amoussou E., Kouame Y. M., Kouassi K. L., Bi V. H. N., Ta M. Y. (2018). Assessment of Spatio-Temporal Changes of Land Use and Land Cover over South-Western African Basins and Their Relations with Variations of Discharges. Hydrology (2018,5,56), <u>doi:10.3390 /hydrology5040056</u>
- 36. Zhanga J., Adu D., Fanga Y., Appiah D., **Antwi E. O.** (2018). Review on China's renewable energy and future projections. International Journal of Smart Grid and Clean Energy (2018). doi: 10.12720/sgce.7.3.218-224
- 37. Mortey M. E., **Ofosu E. A.**, Kolodko D. V., Kabo-bah A. T. (2017). Sustainability Assessment of the Bui Hydropower System. Environments 2017, 4(25). <u>doi:10.3390/environments4020025</u>
- 38. Iddrisu, W. A., Nokoe, K. S., Luguterah, A., **Ofosu, E. A**. (2017). Spatio-Temporal Relationship between River Flows and Gauge Heights in the Black Volta River. Mathematical Problems in Engineering.
- Obahoundje S., & Ofosu, E., Akpoti K., Kabo-bah, A. T. (2017). Land Use and Land Cover Changes under Climate Uncertainty: Modelling the Impacts on Hydropower Production in Western Africa. Hydrology. 4. doi:10.3390/hydrology5040056.
- Appiah-Effah E., Nyarko K. B., Awuah E., Afful K. M., Ofosu E. A. (2017). Performance of Rotary Drum Composter on the Die off of Ascaris and Trichuris during fecal sludge composting. Journal of Environmental Engineering, 2017,
- Iddrisu W. A., Nokoe K. S., Luguterah A., Ofosu E. A. (2017). Generalized Additive Mixed Modeling of River Discharge in the Black Volta River. Open Journal of Statistics. <u>https://doi.org/10.4236/ojs.2017.74043</u>
- Iddrisu, W.A., Nokoe, K.S., Osei, F.B., Ofosu, E.A. (2016). Spatial Bayesian methods of Flow Forecasting in the Black Volta River. European Journal of Scientific Research. Vol. 137, No. 1, pp. 89-105
- Akpoti K., Ofosu E. A. and Kabo-bah A. T. (2016). Impacts of Rainfall Variability, Land Use and Land Cover Change on Stream Flow of the Black Volta Basin, West Africa. Hydrology 2016, 3(3), 26
- 44. Afful K., Oduro-Kwarteng S., **Ofosu E. A**. and Awuah E, (2016). Odour Impact Determination of a Communal Toilet: Field Measurement with Panellists Using Dynamic Plume Method and Dispersion Modelling. Open Journal of Air Pollution.
- 45. Appiah-Effah, E., Nyarko, K. B., **Ofosu, E. A.** and Awuah, E., (2016). Effect of bulking materials and mixing ratios on concentration of nutrients during composting of raw faecal sludge from peri-urban areas. Water Practice & Technology, Vol 11, No. 1, 2016
- Appiah-Effah, E., Nyarko, K. B., Adum, L., Ofosu, E. A. and Awuah, E., (2015). Perception of Peri-Urban Farmers on Fecal Sludge Compost and Its Utilization: A Case Study of Three Peri-Urban Communities in Ashanti Region of Ghana. Compost Science & Utilization, 23:4, 267-275. 2015

- 47. Mul, M.L., Sidibé, Y., Annor, F., **Ofosu, E. A**., Boateng-Gyimah, Ampomah, B., Addo, C., (2015). Balancing hydro generation with sustainable ecosystem management. In Water storage and hydropower development for Africa - Supplement to the International Journal of Hydropower and dams, page 46-50, 2015.
- Appiah-Effah, E., Nyarko, K. B., Ofosu, E. A. and Awuah, E., (2015). Heavy metals and microbial loads in raw fecal sludge from low-income areas of Ashanti Region of Ghana. Water Practice & Technology Vol 10 No 1, 2015.
- 49. A. T. Kabo-bah, G. K. Anornu, **E. A. Ofosu**, Robert Andoh, Kamila Justyna (2014). Spatialtemporal phenomena of Evapotranspiration over Black Volta of West Africa. International Journal of Water Resources and Environmental Engineering Vol 6 (4), 2014.
- 50. Ofosu, E. A., van der Zaag P., van de Giesen N., Odai S. N., Sakah, M., (2014). Success Factors for Sustainable Irrigation Development in sub-Saharan Africa. African Journal of Agricultural Research, Vol 9 (51) p 3720-3728, 2014.
- 51. **Ofosu, E. A**., van der Zaag P., van de Giesen N., Odai S. N., Amanor, R. (2014). Upscaling of Irrigation development in the White Volta sub-basin. Journal of Energy and Natural Resource Management, Vol 1, Issue 1.
- 52. Gyasi S. F., Awuah Esi, **Ofosu E. A.**, Kotei D. & Mohamed A. K., (2013). Environmental Sanitation Attitudes in Buruli Ulcer endemic communities and its potential impact on MU infections in the Asanti Akim North District, Ghana. Research Journal of Environmental Science, ISSN 1819-3412.
- 53. **Ofosu, E.A.**, van der Zaag P., van de Giesen N., Odai S. N., (2010). Productivity of irrigation technologies in the White Volta basin. Physics and Chemistry of the Earth. Volume 35, Issues 13-14, Pages 706-716
- 54. Duodu, A., **Antwi, E. O**., & Gyamfi, S. (n.d.). The Role of Solar Power in Enhancing Sustainable Energy in Electricity Generation Mix Across Ghana.

Publications In Book Chapters

- 55. Yaa Ntiamoah Baidoo, Ben Yaw Ampomah, and **Eric Antwi Ofosu** (2017). Dams, Developmgment and Downstream Communities: Implications for Re-optimising the operations of the Akosombo and Kpong Dams in Ghana. ISBN: 978-9988-2-5046-1
- 56. Ofosu Eric Antwi (2011), Sustainable Irrigation Development in the White Volta sub-basin (2011). Published by CRC Press. The Netherlands. ISBN 9780415621038 CAT# K14719
- 57. Asamoah M., Kabo-Bah A.T., Antwi-Ofosu E. (2020) Spatial and SocioEconomic Impacts Analysis of BUI Hydropower Dam on Downstream Communities. In: Adjallah K., Birregah B., Abanda H. (eds) Data-Driven Modeling for Sustainable Engineering. ICEASSM 2017. Lecture Notes in Networks and Systems, vol 72. Springer, Cham. https://doi.org/10.1007/978-3-030-13697-0_23
- 58. Eric A. Ofosu, Mark Amo-Boateng, Martin K. Domfeh, Robert Andoh (2018). Re-engineering Hydropower Plant for Improved Performance. In (Ed) Amos Kabo-bah and Chukuemekah J. Diji, Sustainable Hydropower in West Africa: Planning Operation and Challenges. 189-195. Academic Press. An imprint of Elsevier. https://doi.org/10.1016/B978-0-12-813016-2.00012-5
- 59. Eric A. Ofosu, Marloes Mul, Maxwell Boateng-Gyimah, Frank Annor, and Ben Y. Ampomah (2017). Overview of the Re-operation and Re-optimisation of the Akosombo and Kpong Dams Project. In (Ed) Yaa Ntiamoah Baidoo, Ben Yaw Ampomah, and Eric Antwi Ofosu. Dams, Development and Downstream Communities: Implications for Re-optimising the operations of the Akosombo and Kpong Dams in Ghana
- 60. Marloes L. Mul, Eric A. Ofosu, Yaw Mante, Benjamin Ghansah, Frank O. Annor, and Maxwell Boateng-Gyimah (2017). Defining Restoration Flow Targets to Restore Ecological Functions and Livelihoods in the Lower Volta Basin. In (Ed) Yaa Ntiamoah Baidoo, Ben Yaw Ampomah, and Eric Antwi Ofosu. Dams, Development and Downstream Communities: Implications for Re-optimising the operations of the Akosombo and Kpong Dams in Ghana
- 61. Marloes L. Mul, Bedru Balana, Frank O. Annor, Maxwell Boateng-Gyimah, **Eric A. Ofosu**, and Jeffrey Dokyi (2017). Framework for Re-operating the Large Hydropower Dams to Improve Local Livelihoods and Poverty Reduction. In (Ed) Yaa Ntiamoah Baidoo, Ben Yaw Ampomah, and Eric Antwi Ofosu. Dams, Development and Downstream Communities: Implications for Re-optimising the operations of the Akosombo and Kpong Dams in Ghana.

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I <u>Rev. Prof. Ing. Eric Antwi Ofosu</u> the undersigned, certify that to the best of knowledge and belief, these data correctly describe me, my qualifications and my experience.

12th February, 2025

(Signature)

(Date)