# Alexander Kofi Anning

Department of Theoretical and Applied Biology

Faculty of Biosciences

College of Science

Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana

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#### **EDUCATION**

| 2009-2013 | Ph. D., Plant and Environmental Biology, Ohio University, Athens, |
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|           | OH, USA.  |
| 2002-2004 | M. Phil., Biological Sciences, Kwame Nkrumah University of        |
|           | Science and Technology (KNUST), Kumasi, Ghana.                    |
| 1997-2001 | B. Sc., Biological Sciences, KNUST, Kumasi, Ghana.                |

#### UNIVERSITY TEACHING EXPERIENCE

| 2018-date | Associate Professor, Department of Theoretical and Applied       |
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|           | Biology, KNUST, Kumasi, Ghana.                                   |
| 2018-date | Visiting Professor, ISA Lille University, Lille, France.         |
| 2009-2018 | Senior Lecturer, Department of Theoretical and Applied Biology,  |
|           | KNUST, Kumasi, Ghana.  |
| 2009-2013 | Teaching/Research Associate, Department of Environmental and     |
|           | Plant Biology, Ohio University, Athens, OH, USA.                 |
| 2005-2009 | Lecturer, Department of Theoretical and Applied Biology, KNUST,  |
|           | Kumasi, Ghana.   |
| 2004-2005 | Teaching/Research Associate, Department of Theoretical and       |
|           | Applied Biology, KNUST, Kumasi, Ghana.                           |
| 2003-2004 | Demonstrator, Department of Theoretical and Applied Biology,     |
|           | KNUST, Kumasi, Ghana.  |
| 2001-2002 | Teaching Assistant (National Service), Department of Theoretical |
|           | and Applied Biology, KNUST, Kumasi, Ghana.                       |

### **Courses Taught**

- BIOL 153 Introductory Genetics
- SCI 352 Scientific Research and Communication
- BIOL 452 Biodiversity Utilization and Conservation
- BIOL 463 Aquatic Ecology
- BIOL 466 Special Topics in Biology
- BIOL 501 Ecosystems, Conservation and Vegetation Analysis (both regular & IDL)

- BIOL 525 Research Methods I (both regular & IDL)
- BIOL 526 Research Methods II (both regular & IDL)
- BIOL 531 Ecological Survey Methods

#### RESEARCH INTERESTS

Tropical rainforest dynamics and disturbance ecology, fire ecology, invasion ecology, natural resources conservation and management, phytoremediation, bioremediation, dendroecology and global environmental change.

#### SUMMARY OF CURRENT RESEARCH PROGRAMMES

- Assessment of seaweed diversity, abundance and distribution in relation to some environmental factors in Ghana
- Reclamation of degraded mine sites using organic amendments and phytoremediation to enhance biodiversity recovery.
- Understanding the link between impacts and mechanisms of spread of invasive plant species in some tropical rainforests
- Floristic and ethnobotanical studies of forest resources in Ghana in relation to environmental and anthropogenic factors.

### SUPERVISION OF STUDENT PROJECT WORK/THESIS/RESEARCH (2014-DATE)

- Successfully supervised and mentored 34 MSc/MPhil/PhD Students since 2014.
- Supervised 31 undergraduate students' projects between 2014 and now.
- Currently supervising 18 MSc/MPhil/PhD students' research projects, and 4 undergraduate theses.

#### **PUBLICATIONS**

Summary: Refereed Journal Publications: **40**; Book Chapters **2**; Instructional Material: **1**; Conferences: **17**; Total citations: **1162**; h-index: **16**; i10 index: **23**; Research Interest Score from ResearchGate: **725.00** (as at July **12**, **2023**)

### Articles in Refereed Journals

- 1. Akrong MO, **Anning AK**, Addico GND, Hogarh JN, Adu-Gyamfi A (2023). Variations in seaweed-associated and planktonic bacterial communities along the coast of Ghana *Marine Biology Research*, 1-15
- 2. **Anning AK**, Ofori-Yeboah A, Baffour-Ata F, Owusu G (2022). Climate change manifestations and adaptations in cocoa farms: Perspectives of smallholder farmers in the Adansi South District, Ghana. *Current Research in Environmental Sustainability* 4, 100196.
- 3. Quarm JA, **Anning AK**, Fei-Baffoe B, Siaw VF, Amuah EEY (2022). Perception of the environmental, socio-economic and health impacts of artisanal gold mining in the Amansie West District, Ghana. *Environmental Challenges* 9, 100653.
- 4. Akrong MO, **Anning AK**, Addico GND, Hogarh JN, Adu-Gyamfi A, deGraft-Johnson KAA, Ale M, Meyer AS (2022). Biomass and carrageenan yields of Hypnea musciformis

- in relations to selected environmental variables in the coastal waters of Ghana. *Journal of Applied Phycology* 34 (5), 2589-2601.
- Osei-Twumasi D, Anning AK, Fei-Baffoe B, Danquah KO (2022). Suitability of remediated hydrocarbon-contaminated drill mud waste for cultivation of selected food crops. Environmental Technology and Innovations, 102705. https://doi.org/10.1016/j.eti.2022.102705
- 6. Owusu G, **Anning AK**, Belford EJD, Acquah E (2022). Plant species diversity, abundance and conservation status of the Ankasa Resource Reserve, Ghana. *Trees, Forests and People 8*, 100264.
- 7. Appiah-Badu K, **Anning AK**, Eshun B, Mensah G (2022). Land use effects on tree species diversity and soil properties of the Awudua Forest, Ghana. *Global Ecology and Conservation* 34, e02051.
- 8. Baffour-Ata F, Antwi-Agyei P, Nkiaka E, Dougill AJ, **Anning AK**, Kwakye SO (2022). Climate information services available for farming households in Northern Region, Ghana. *Weather, Climate and Society* 34(2):467-480.
- 9. Akoto R, **Anning AK**, Belford EJD (2021). Effects of EDTA-Assisted Phytoremediation on Soil Physicochemical and Biological Properties. *International Journal of Environmental Science and Technology*. <a href="https://doi.org/10.1007/s13762-021-03770-9">https://doi.org/10.1007/s13762-021-03770-9</a>
- 10. Baffour-Ata F, Antwi-Agyei P, Nkiaka E, Dougill AJ, **Anning AK**, Kwakye SO (2021). Effect of climate variability on yields of selected stable food crops in Northern Ghana. *Journal of Agriculture and Food Research* 6, 100205
- 11. Akrong MO, **Anning AK**, Addico GND, deGraft-Johnson KAA, Adu-Gyamfi A, Ale M, Meyer AS (2021). Spatio-temporal variations in seaweed diversity and abundance of selected coastal areas in Ghana. *Regional Studies in Marine Science* 44: 101719. <a href="https://doi.org/10.1016/j.rsma.2021.101719">https://doi.org/10.1016/j.rsma.2021.101719</a>
- 12. Akoto R, **Anning AK** (2021). Heavy metal enrichment and potential ecological risks from different solid mine wastes at a mine site in Ghana. *Environmental Advances* 3 (2021), 100028. https://doi.org/10.1016/j.envadv.2020.100028.
- 13. Dogor GKF, Acquah E, **Anning AK** (2020). Influence of soil physicochemical parameters on species composition and structure in the Togo Plateau Forest Reserve in Ghana. *World Journal of Advanced Research and Review* 8 (3): 204-227.
- 14. Dogor GKF, Acquah E, **Anning AK** (2020). Floristic composition and structure in relation to elevation in the Togo Plateau Forest Reserve in Ghana. *European Journal of Biology and Biotechnology* 1(6): 1-8.
- 15. Osei-Twumasi D, Fei-Baffoe B, **Anning AK**, Danquah KO (2020). Biodegradation of Hydrocarbon-Contaminated Drill Mud Waste with Compost and Cow Bile. *Environmental Processes* 7: 1111-1127.
- 16. Osei-Twumasi D, Fei-Baffoe B, **Anning AK**, Danquah KO (2020). Synergistic effects of compost, cow bile and bacterial culture on bioremediation of hydrocarbon-contaminated drill mud waste. *Environmental Pollution*. 115202
- 17. Dogor GKF, **Anning AK**, Oteng-Yeboah A (2019). Plant diversity and distribution patterns in a tropical montain forest in Ghana. *Journal of the Ghana Science Association* 18 (2): 1-10.

- 18. Nyarko RA, Larbie C, **Anning AK**, Baidoo PK, Emikpe BO, Oyagbemi AA, Jarikre TA (2019). *Griffonia simplicifolia* (DC.) Baill. attenuates gentamicin and cisplatin-induced nephrotoxicity in rats. *Comparative Clinical Pathology* 28: 1293-1304. <a href="https://doi.org/10.1007/s00580-019-02934-x">https://doi.org/10.1007/s00580-019-02934-x</a>.
- 19. Nyarko RA, Larbie C, **Anning AK**, Baidoo PK (2019). Phytochemical constituents, antioxidant activity and toxicity assessment of hydroethanolic leaf extract of *Griffonia simplicifolia*. *International Journal of Phytopharmacology* 10(1): 6-18.
- 20. Adigbli DM, **Anning AK**, Adomako JK, Fosu-Mensah BY (2019). Effects of *Broussonetia* papyrifera invasion and land use on vegetation characteristics in a tropical forest of Ghana. *Journal of Forestry Research* 30(4): 1363-1673.
- 21. Dogor GKF, Nyarko RA, **Anning AK**, Oteng-Yeboah A (2018). Medicinal plant use and conservation practices by communities in the Togo Plateau Forest Reserve, Ghana. *Journal of Medicinal Plants Research* 12(30): 575-589.
- 22. Nero BF, **Anning AK** (2018). Variations in soil characteristics among urban green spaces in Kumasi, Ghana. *Environmental Earth Sciences* 77: 317. Published online on April 21, 2018.
- 23. **Anning AK**, Gyamfi B, Effah AT (2018). *Broussonetia papyrifera* controls nutrient to soil to facilitate its invasion in a tropical forest of Ghana. *Journal of Plant Ecology* 11 (6): 909-918.
- 24. **Anning AK**, Akoto R (2018). Assisted phytoremediation of heavy metal contaminated soil from a mined site with *Typha latifolia* and *Chrysopogon zizanioides*. *Ecotoxicology and Environmental Safety* 148: 97-104.
- 25. Nero BF, Callo-Concha D, **Anning AK**, Denich M. (2017). Urban green spaces enhance climate change mitigation in cities of the global south: case of Kumasi, Ghana. Urban Transitions Global Summit 2016, 5-9 September 2016, Shanghai, China. *Procedia Engineering* 198: 69-83.
- 26. **Anning AK**, Dyer JM, McCarthy BC (2014). Tree growth response to fuel reduction treatments along a topographic moisture gradient in mixed-oak forests, Ohio, USA. *Canadian Journal of Forestry Research* 44: 413-421.
- 27. Silver EJ, Speer JH, Kaye M, Reo NJ, Howard LF, **Anning AK**, Wood SW, Wilbur HM (2013). Fire history and age structure of an oakpine forest on Price Mountain, Virginia, USA. *Natural Areas Journal* 33 (4): 440-446.
- 28. **Anning AK**, McCarthy BC (2013). Long-term effects of prescribed fire and thinning on residual tree growth in mixed-oak forests of southern Ohio. *Ecosystems* 16 (8): 1473-1486.
- 29. **Anning AK**, McCarthy, BC (2013). Competition, size and age affect tree growth response to fuel reduction treatments in mixed-oak forests of Ohio. *Forest Ecology and Management* 307: 74-83.
- 30. **Anning AK**, Rubino DL, Sutherland EK, McCarthy BC (2013). Dendrochronological analysis of white oak growth patterns across a topographic moisture gradient in southern Ohio. *Dendrochronologia* 31 (2): 120-128.
- 31. **Anning AK**, Korsah PE, Addo-Fordjour P (2013). Phytoremediation of wastewater with *Limnocharis flava, Thalia geniculata* and *Typha latifolia* in constructed wetlands. *International Journal of Phytoremediation* 15 (5): 452-464.

- 32. Addo-Fordjour P, **Anning AK**, Larbi JA, Akyeampong S (2009). Liana species richness, abundance and relationship with trees in the Bobiri forest reserve, Ghana: impact of management systems. *Forest Ecology and Management* 157 (8): 1822-1828.
- 33. Addo-Fordjour P, **Anning AK**, Addo MG, Osei MF (2009). Composition and distribution of vascular epiphytes in a tropical semi-deciduous forest, Ghana. *African Journal of Ecology* 47 (4): 767-773.
- 34. Addo-Fordjour P, Obeng S, **Anning AK**, Addo MG (2009). Floristic composition, structure and natural regeneration in a moist semi-deciduous forest following anthropogenic disturbances and plant invasion. *International Journal of Biodiversity and Conservation* 1 (2): 21-37.
- 35. **Anning AK**, Akyeampong S, Addo-Fordjour P, Anti KK, Kwarteng A, Tettey YF (2008). Floristic composition and vegetation structure of the KNUST Botanic Garden, Kumasi, Ghana. *Journal of Science and Technology* 28 (3): 103-116.
- 36. **Anning AK**, Grant NT (2008). An evaluation of local community participation in forest resources conservation in some selected districts of Ghana. *The African Journal of Plant Science and Biotechnology* 2 (2): 39-45.
- 37. Addo-Fordjour P, **Anning AK**, Belford EJD, Akonnor D (2008). Diversity and conservation of medicinal plants in the Bomaa community of the Brong Ahafo region, Ghana. *Journal of Medicinal Plant Research* 2 (9): 226-233.
- 38. Addo-Fordjour P, **Anning AK**, Atakorah AE, Agyei PS (2008). Diversity and distribution of climbing plants in semideciduous rainforest, KNUST Botanic Garden, Ghana. *International Journal of Botany* 4 (2): 186-195.
- 39. Akyeampong S, **Anning AK** (2007). Crow and vulture nest density and placement pattern on Kwame Nkrumah University of Science and Technology, Kumasi. *Journal of Ghana Science Association* 9 (2): 138-145.
- 40. **Anning AK**, Yeboah-Gyan K (2007). Diversity and distribution of invasive weeds in Ashanti Region, Ghana. *African Journal of Ecology* 45: 355-360.

## **Book Chapters**

- 41. Addo-Fordjour P, **Anning AK**, Akanwariwiak WG, Belford EJD, Firempong CK. (2012) Medicinal Plants of Ghana: *In:* Singh, R. J. (ed.), Genetic Resources, Chromosome Engineering, and Crop Improvement: Medicinal Plants vol. 6, CPC Press, Taylor & Francis Group, New York, pp. 221-246.
- 42. Mensah MLK, Komlaga G, Donkor AF, Firempong C, **Anning AK**, Dickson AR (2019). Toxicity and safety implications of herbal medicines used in Africa: *In* Builders PF (ed.). *Herbal Medicine*. InTech Open. DOI: 10.5772/intechopen.72437. Available from: https://www.intechopen.com/books/herbal-medicine/toxicity-and-safety-implications-of-herbal-medicines-used-in-africa. ISBN 978-953-51-5791-5

#### Instructional Publication

43. Yeboah-Gyan K, Anning AK (2009). Ecosystems and Conservation for MSC Environmental Science distance programme (BIOL 501) KNUST Faculty of Distance Learning, Kumasi, 87pp.

### Conference Presentations/Contributed Paper Abstracts/Posters

- 1. **Anning AK**, Ahor HS, Osei JO, Hormenu WJK, Hodoameda P (2017). Effects of plant invasion on soil macrofauna composition and ectomycorrhizae formation in a tropical forest of Ghana. 30th Biennial Ghana Science Association (GSA) Conference at the Koforidua Technical University (KTU), Koforidua, Ghana, July 24-27.
- 2. Akoto R, **Anning AK** (2017). Effects of Soil Amendment on Phytoremediation of Heavy Metal Contaminated Soil with *Typha latifolia* and *Chrysopogon zizanioides*. 30th Biennial Ghana Science Association (GSA) Conference at the Koforidua Technical University (KTU), Koforidua, Ghana, July 24-27.
- 3. **Anning AK**, Quarm JA, Fei-Baffoe B (2016). Trading our heritage for less: effects of artisanal gold mining on a moist tropical forest in Ghana. 3<sup>rd</sup> College of Science Research Retreat, 14-17<sup>th</sup> July, 2016. Pempamsie Hotel and Conference Center, Cape Coast.
- 4. Arkoh MA, Boateng EO, **Anning AK** (2016). Composition and structure of advanced regeneration of timber species in the Asenanyo River Forest Reserve, Ghana. 3<sup>rd</sup> College of Science Research Retreat, 14-17<sup>th</sup> July, 2016. Pempamsie Hotel and Conference Center, Cape Coast.
- 5. Nero BF, Callo-Concha D, **Anning AK**, Denich M (2016). Urban green spaces enhance climate change mitigation in cities of the global south: case of Kumasi, Ghana. Urban Transitions Global Summit 2016, 5-9 September 2016, Shanghai, China.
- Anning AK, Dyer JM, McCarthy BC (2013). Tree growth response to fuel reduction treatments along a topographic moisture gradient in mixed-oak forests, Ohio, USA. 98<sup>th</sup> Annual General Meeting of the Ecological Society of America, Minneapolis Convention Center, Minneapolis, MN, USA, August 4-9, 2013.
- 7. **Anning AK**, McCarthy BC (2013). Competition, size and age affect tree growth response to fuel reduction treatments in mixed-oak forests of Ohio. 74<sup>th</sup> Annual General Meeting of the Association of Southeastern Botanists, Charleston Civic Center, Charleston, WV, USA, April 10-13, 2013.
- 8. **Anning AK**, McCarthy BC (2012). Long-term tree growth response to prescribed fire and thinning treatments in the mixed oak forests of southeastern Ohio. 97<sup>th</sup> Annual General Meeting of the Ecological Society of America, Portland Convention Center, Portland, OR. USA, August 5-10, 2012.
- 9. **Anning AK**, McCarthy BC (2012). Long-term growth response of trees to prescribed fire and thinning treatments in the mixed oak forests of southeastern Ohio. Ohio University Student Research Expo, Athens, OH, May 3, 2012.
- 10. **Anning AK**, McCarthy BC (2012). Long-term growth response of trees to prescribed fire and thinning treatments in the mixed oak forests of southeastern Ohio. 73<sup>rd</sup> Annual General Meeting of the Association of Southeastern Botanists, Athens, Georgia, USA, April 4-7, 2012.
- 11. Korsah PE, **Anning AK**, Addo-Fordjour P (2011). Phytoremediation of heavy metal contaminated irrigation water using *Limnocharis flava*, *Thalia geniculata* and *Typha latifolia*

- in constructed wetlands. 27<sup>th</sup> Biennial Conference of the Ghana Science Association, KNUST, Kumasi, Ghana, July 10-15, 2011.
- 12. **Anning AK**, Rubino DL, Sutherland EK, McCarthy BC (2011). Dendrochronological analysis of white oak growth patterns across a topographic moisture gradient in southern Ohio. 96<sup>th</sup> Annual General Meeting of the Ecological Society of America, Auxtin Convention Center, Austin, TX. USA, August 7-12, 2011.
- 13. **Anning AK**, Rubino DL, Sutherland EK, McCarthy BC (2011). Dendrochronological analysis of white oak growth patterns across a topographic moisture gradient in southern Ohio. 72<sup>nd</sup> Annual Meeting of the Association of Southeastern Biologists in Huntsville, Alabama, USA, April 13-16, 2011.
- 14. Belford EJD, **Anning AK**, Obiri-Danso K, Schroeder P (2010). Phytoremediation of heavy metal contaminated soil in the tropics Screening of indigenous vegetation for potential species. 3<sup>rd</sup> Alps Bio Cluster Event. Environmental Biotechnologies to improve human health and quality of life, Helmholtz-Zentrum, Munich Germany, February 3-4, 2010.
- 15. Belford EJD, **Anning AK**, Obiri-Danso K, Adanyeguh MI, Doamekpor DS (2010). Distribution, abundance and taxonomy of heavy metal tolerant species in degraded mine site: Potential candidates for phytoremediation. 26<sup>th</sup> Biennial Conference of the Ghana Science Association, Cape Coast, August 4-9, 2010.
- 16. Anning AK, Owusu-Sekyere E, Ewudzie-Sampson J, Kusi A, Awuah M (2008). Impacts of selective logging and *Broussonetia papyrifera* invasion on tree species diversity of the Afram Headwaters Forest Reserve in Ashanti, Ghana. 2<sup>nd</sup> College of Science, KNUST Biennial Research Conference, Chances Hotel, Ho, Volta Region, Ghana. July 10-13, 2008.
- 17. **Anning AK**, Akyeampong S, Addo-Fordjour P, Mensah AL, Wiredu OK (2007). Preliminary assessment of the ecological and physicochemical impacts of macrophyte infestation on drinking water reservoirs in the Ashanti Region. 25<sup>th</sup> Biennial Conference of the Ghana Science Association held at Akim Tafo and Bunso, ER, Ghana, August 5-10, 2007.

### Seminars/Invited Guest Speaker/Lecture

- 1. Resource person; seminar on "How to Succeed as a University Student in Ghana" organized by the Students Representative Council of the Kessben University, Kuntunase, March 22, 2018.
- 2. Resource person, seminar on "Research Design, Ethics and Data Analysis" organized by the Graduate Students Association of Ghana, KNUST, 15<sup>th</sup> February 2018, School of Graduate Studies, KNUST.
- 3. Resource person; a research training on "Writing Thesis and Completing Graduate Studies", Graduate Students Association of Ghana, KNUST, October 2017.
- 4. Facilitator; a three-day workshop on "Research Design and Biological Data Analysis" organized by the Department of Theoretical and Applied Biology (TAB), KNUST and Prof. Eric Mark Wiener of Ramapo College, New Jersey at the Dept. of TAB for graduate students, May 24 to June 3, 2017.
- Resource person; "How to Successfully Complete a Thesis and a Comprehensive Examination". Seminar for NUPG Students, KNUST, January 22, 2017, Protestant Chapel, KNUST.

- 6. Resource person; "Lifestyle related diseases". First Biennial Conference of the Methodist Youth Fellowship, Amakom Circuit-Kumasi Diocese, Christ the King Method Church, Asokwa, Kumasi. 29th May, 2015.
- 7. Resource person; "Environmental Sustainability and Mining: Mitigating the environmental impacts of mining activities." Seminar organized for the Bibiani-Anwhiaso-Bekwai District Assembly, Bibiani, Western Region, Ghana. 22<sup>nd</sup> January, 2015.
- 8. Speaker; "Long-term Growth Response of Trees to Prescribed Fire and Thinning Treatments in Southern Ohio". Ecolunch, Department of Biological Sciences, Ohio University, Athens, OH, May 16, 2012.
- 9. Guest lecturer; "Principles and Applications of Dendrochronology". Plant Physiological Ecology Lecture (PBIO 4/526), Dept. of Environmental and Plant Biology, Ohio University, Athens, OH, May 11, 2011.
- 10. Guest lecturer; "Disturbance and Succession in Plant Communities". Plant Ecology (PBIO 209) Lecture, Dept. of Environmental and Plant Biology, Ohio University, Athens, OH, February 25, 2010.

### **Workshops/Short Courses**

- 1. Freshwater Ecology and Catchment Modeling, Danish University Building Stronger Universities (BSU II), at the Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, 4-10 June, 2015.
- 21st Annual North American Dendroecological Fieldweek (NADEF 2011), Mountain Lake Biological Station, Pembroke, VA, USA, 1-9th August, 2011.
- 3. Workshop on Participatory Curriculum Development on Invasive Alien Species (IAS) and Integrating IAS Issues into Learning Institution Activities in Ghana. Sasakawa Centre, University of Cape Coast, Cape Coast, Ghana. 27 28th May, 2009.
- 4. IFS/CANR/CREPA workshop on Sustainable Water Resources Management and Sanitation, Laboratory Methods, and Proposal Writing. NODA Hotel and College of Agriculture and Natural Resources (CANR), KNUST, Kumasi, Ghana. 26 31th October, 2008.
- 5. CTA/UNAAB training workshop on Scientific Data Management, University of Agriculture, Abeokuta, Ogun State, Nigeria. 20 30<sup>th</sup> March, 2006.
- Tropical Forest Ecology Course jointly organized by the Ramapo College of New Jersey, USA and KNUST, at the Department of Theoretical and Applied Biology, KNUST, Kumasi, Ghana. 5 – 30th June, 2003. Course Facilitator: Dr. Eric Wiener of Ramapo College, USA.

#### MEMBERSHIPS OF PROFESSIONAL ASSOCIATIONS

- Member, Ecological Society of America, USA, 2012 date
- Member, Association of Southeastern Botanists, USA, 2012 date

- Member, Sigma Xi, Ohio Chapter, USA, 2011 date
- Member, Tree Ring Society, USA, 2011 date
- Member, Ghana Science Association, Ghana, 2008 date
- Member, International Biometry Society, Ghana Chapter, Ghana, 2006 to date
- Member, University Teachers Association of Ghana, Ghana, 2005 date

### Other Affiliations

Fellow, University Hall (Katanga), KNUST, 2014-date.

#### **SERVICE TO COMMUNITY**

### National/International

- Chairman, Accommodation subcommittee of the Local Organizing Committee, 2022 GUSSA Games, by virtue of being the Chairman of the Committee of Hall Administrators (CoHA).
- Resource Person, Ghana Science Association Stem Workshop for Teachers, 19th October, 2020.
- Leader, Bawku RGN Invigilation Team, for the Ministry of Health Diploma Terminal Examination, 14-18<sup>th</sup> November, 2021.
- Visiting Scholar, JUNIA/ISA Lille University, Lille, France as part of a Teaching Mobility under the Erasmus + Project collaboration between JUNIA/ISA Lille University and KNUST. October, 2018 to date.
- Member, College of Art and Science Dean's Search Committee. Ohio University (2011).
- Thesis Assessor, Institute of Sanitation and Environment, University of Ghana, Legon. 2017-date.
- Reviewer for 23 international and national refereed journals (see list below)
- Resource Person, NUPG Project Seminar Series. "Writing a Thesis: What is Expected of Students". NUPG, KNUST. February 26, 2017.
- Resource Person, Seminar on Environmental Sustainability and Mining: Mitigating the environmental impacts of mining activities. Bibiani-Anhwiaso-Bekwai District Assembly, Western Region, Ghana. January 22, 2016.
- Resource Person, Talk on Lifestyle Related Diseases. First Biennial Conference of the Methodist Youth Fellowship, Amakom Circuit-Kumasi Diocese, Christ the King Method Church, Asokwa, Kumasi. 29th May, 2015
- Member, MPhil Thesis Supervision Committee for David Adigbli. Institute of Sanitation and Environment, University of Ghana, Legon. 2013-2014.

#### **KNUST**

- Chairman, College of Science Tracer Studies Committee, April 2023 -date
- Cognate Member, College of Health Sciences Board, August 2020-date.
- Chairman, Botanic Garden Management Committee. 2019-date
- Member, Faculty of Bioscience Board, 2016-date
- Chairman, Department of TAB Strategic Plan Committee, 2020-date
- Chairman, Faculty of Biosciences Accreditation Committee, 2021-date.
- Chairman, Departmental Sub-Committee on Quality Assurance, Department of Theoretical and Applied Biology, KNUST.
- Academic Tutor, Department of Theoretical and Applied Biology, KNUST, Ghana. 2005-2009, 2013 to date
- Member, Board of Directorate of Students Affairs, January 2022 October 2022
- Member, Security Services Management Committee, KNUST, January 2022 October 2022
- Member, Health Services Board, KNUST, January 2022 October 2022
- Hall Master, University Hall (Katanga Hall), KNUST, August 2018-2022.
- Reviewer for KRef grant applications, Office of Grants and Research, KNUST (2 applications), May -June, 2022.
- Member, Postgraduate Scholarship Scheme Committee, College of Science, KNUST. May 2021 to 2020.
- Member, Committee on Mandatory One Year Taught Course(s) in PhD Programme, College of Science, April 2021.
- Chairman, University Hall Council, KNUST, August 2018 2022.
- Chairman, Committee of Hall Administrators, KNUST, Jan 20, 2022 Oct 2022.
- Member, Committee of Hall Administrators, KNUST, August 2018-Oct 2022.
- Member, Residence Committee, KNUST, August 2018-Oct 2022.
- Chairman, Comprehensive Examination Committee, Dept. of TAB, Jan 2017-2020.
- Member, College of Science Grant and Research Committee, January 2017-2018.
- Member, College of Science Board. August 1, 2016 2020.
- Member, College of Science Tracer Studies Committee 2019-2022
- Cognate Member, College of Agriculture and Natural Resources Board. 2016 2020.
- Chairman, Vice Chancellor/PRC's Sub-Committee to review the proposal for establishing a new programme in Cultivar Development by the Department of Crop and Soil Sciences. February 2016.
- Chairman, Committee to prepare document on the BSc Biological Sciences Programme for Reaccreditation by the National Accreditation Board.
- Chairman, Committee to develop modalities for Comprehensive Examination for PhD Students. March 10, 2015.
- Examination Officer, Department of Theoretical and Applied Biology. June 2014-2018
- Member, Student Achievement Programme, College of Science. February 25, 2014 2020

- Member, College of Science Research Co-ordinating Committee. 2013-2018.
- Member, Committee to Investigate Unlawful Procession of University Hall Students, University Hall. April 2014.
- Secretary, Committee for drafting BSc Programme in Microbiology. January, 2014.
- Assistant Examination Officer, Department of Theoretical and Applied Biology. January 2014 - May 2014.
- Senior Member responsible for collating research activities of staff of the Departments of Theoretical and Applied Biology and Environmental Science for both the University's departmental rankings and for Quality Assurance Bulletin. (2008-2009)
- Assistant Departmental Seminar/Project Coordinator, Department of Theoretical and Applied Biology, KNUST, Ghana. (2007-2009)
- Member, Botanic Garden and Herbarium Management Committee, Department of Theoretical and Applied Biology, KNUST, Ghana. (2007-2009)
- Examination Coordinator, College of Science Examinations Office, KNUST, Ghana. (2005-2009)

### Journal Reviews

- 1. Environmental Technology and Innovations (1 review), 2020
- 2. Journal of Plant Ecology (1 review), 2020
- 3. Geoderma (2 reviews), 2020
- 4. Water, Soil and Air Pollution (I review), 2020
- 5. Environmental Pollution (12 reviews), 2019 to date
- 6. Biological Invasions (2 review), August 2018.
- 7. Clean-Soil, Air and Water (1 review), November, 2017
- 8. Ecotoxicology and Environmental Safety (6 reviews), October 2017 to date
- 9. International Journal of Wildlife Management (1 review), October 2016
- 10. International Journal of Phytoremediation (2 reviews), June 2016
- 11. International Conference on Water Resources and Environment, 2016 (WRE2016) (1 review), June 2016.
- 12. Forests, 2014 -date (8 reviews)
- 13. African Journal of Pharmacy and Pharmacology (1 review), 2010
- 14. African Journal of Ecology (5 reviews), 2008 date
- 15. Journal of Science and Technology, 2008 date
- 16. Journal of the Ghana Science Association (2 reviews)
- 17. Journal of Plant Interactions (1 review), 2008
- 18. African Journal of Agricultural Research (1 review), 2008
- 19. Dendrochronologia, 2013 -date (5 reviews)
- 20. Journal of Research in Hospitability, Tourism and Culture, 2013 (1 review)
- 21. Journal of Geochemical Exploration, 2013 (1 review)
- 22. Journal of Forest Research, 2013 (1 review)
- 23. Environmental Monitoring and Assessment (1 manuscript)

# RESOURCE MOBILIZATION

- Consultancy Services: A member of a three-member team consulting for Asanko Gold Ghana Limited. 2019-date.
- FSPI Nyansapo Project 2022: A member of an international team working on the project titled "Agricultural-Environment Nexus: improving yield and quality of cocoa production in Ghana." Funded by the French Embassy in Ghana. Grant Amount €40,000.00.